

Grass Roots

Craft and self-sufficiency

For down to earth people

\$2.95

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Water Tanks

•
Rush Seating

•
Stretching

•
Reviving an Old
Orchard

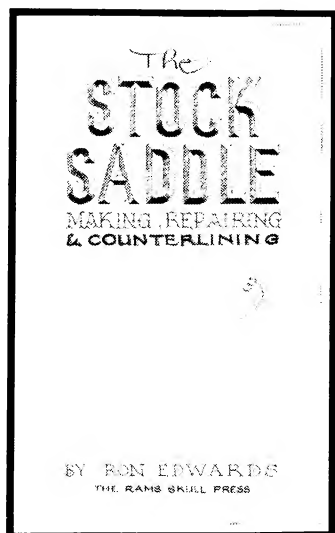
•
Home Birth

•
Hydro Power



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By Ron Edwards



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SURVIVING IN THE EIGHTIES

Surviving in the Eighties

Michael Boddy and Richard Beckett
Illustrated by Janet Dawson Boddy



By Michael Boddy and Richard Beckett

If you're living in the city and would like your garden, however tiny, to give you fresh and inexpensive fruit and vegetables, or if you're moving to the country and would like to run a small productive farm, 'Surviving in the Eighties' is indispensable.

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The two authors have drawn on many years of practical experience to provide a uniquely practical Australian publication.

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Front Cover: *Grass Roots* readers have come to the rescue of those suffering the effects of the present severe drought in Australia. In this issue, four contributors discuss the construction, repair and pitfalls associated with water tanks. No-one however, has suggested how they can be kept full over the next few months.

Back Cover: The creative environment, an important ingredient in everyone's development, is essential for children of all ages. Starting on p. 55, two *Grass Roots* house-husbands discuss the planning and materials needed to construct real adventure playgrounds that kids will love to use.

Feedback Link-Up Feedback

Dear Fellow Readers,

In answer to Lola Wilson's enquiry about orris root. Its botanical name is *Iris Florentina* and is used for sore throats, liver complaints, and also as a diuretic. Reference, *The Herb Book* by John Lust, published by Bantam Books and obtainable at most health stores. Leslie Mathieson was enquiring about herbal remedies and this paperback is very comprehensive. A query from me regarding Rita Summer's recipe for Apple Cider (*While the Billy Boils*) 'Add apples and reserve liquid only'. What reserve liquid? Anyone interested in growing disease free beans should try Snake beans. They are prolific bearers and grow well in this area, south of Bundaberg and in from the coast about 50 km. Remember them growing in the Chinese market gardens at Eastwood over 50 years ago. This suburb is about 12 km from Sydney, so they are reasonably adaptable as regards climatic conditions. Seeds were obtained from Forest Edge Nursery, P.O. Box 60, Yungaburra 4872. They also have many unusual seeds as well as potato yams which I believe a reader was enquiring about.

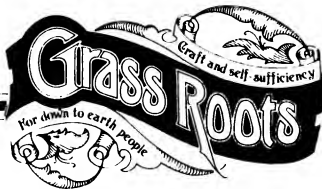
All power to you Meg, David and all – keep up the good work – we need you.

Muriel David,
'Cheviot',
M/S 379 South Isis,
CHILDERS 4660.

Dear GR Readers,

We are very interested in earth wall construction for our future home in New Zealand. We would like to hear from any earth builders in New Zealand or other knowledgeable persons who could enlighten us on building regulations for earth buildings, and modifications to design for earth buildings in an earthquake prone environment.

Erik & Sue
80 Severn Street
BOX HILL 3129.



Edited by Meg and David Miller.

Published by Night Owl Publishers Pty. Ltd., Box 900,
SHEPPARTON 3630.

Grass Roots is produced for those who wish to regain control over their lifestyle by exploring the alternatives to modern mass consumption. Whether you've just started out or you're an old hand, why not share your experience and knowledge with other readers of Grass Roots. All contributions of articles and photos are welcome.

Cover design and artwork by Ian Boyd.

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SHEPPARTON, 3630.

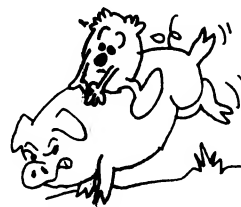
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MULGRAVE, 3170.

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Dear Grass Roots Readers,

Is there anyone out there who would enjoy the use of a 17-acre native bush block in the Ballarat area? It has abundant wild life, and is fully fenced except for a creek frontage adjoining the State forest. Although only 5 km from a rural town the block is quite isolated. We would like to build a weekendender there, develop alternative sources of energy, and keep a horse. Hopefully, someone else could also use the block on a more regular basis – perhaps nature lovers seeking a rural retreat or with a hobby such as goat breeding. We would love to hear from any resourceful people who might enjoy this block with us.

The Williams Family
9/8 Meadon Street
BALACLAVA 3183.



Dear Folks,

First of all I would like to say what a wonderful magazine this is. I am only 17 but already I am very concerned about the way this sick old world of ours is turning out, I am glad to know that more and more people are seeking out a natural existence.

The problem I want to write about is one of the largest threats in history, the damming of the Gordon and Franklin Rivers. We must not let this terrible scheme be carried out. Last week Mr. Fraser received 6000 letters opposing the scheme – every one counts. If you love nature and are concerned at how fast it is disappearing by humanity's wilful destruction, I'm sure you will agree. Think of all the unique and beautiful flora and fauna and important archeological discoveries that will be destroyed. Reasons put forward for carrying out the scheme are:

(i) Employment . . . But when the dam is built it will only provide jobs for 29 people. Also the HEC receives 52% of Tasmania's works budget. All other states in Australia spend only between 8-16% of their capital works budget on power generation. If Tasmania spent 12% on power generation they would have the extra 40% to spend on roads, schools, hospitals, etc. – which would create hundreds more jobs than the dam and would employ people already in the state. (The HEC frequently advertises jobs in the mainland papers.)

(ii) Electricity . . . Tasmania doesn't need the extra electricity. The HEC is currently building a dam on the Pieman River which will be capable of producing 200 MW in 1986. Normally power from a new scheme is allocated years in advance but as yet none of the big industries in Tasmania have shown any interest in it. Yet these same industries are being used as justification for the Gordon below Franklin dam. The HEC also claims that cheap power attracts industry to the state and thus creates employment. However there have been no major industries come to Tasmania for over 10 years and those already there were attracted by cheap electricity because they are highly mechanised and therefore do not employ many people. The HEC is already in debt for \$800,000,000! (The federal budget deficit is \$4,000,000,000.) There are alternatives – a thermal power station, cogeneration (utilising waste heat from industry to generate power – W. Germany generates 33% of its industrial power needs this way) or wind energy.

If you are strongly opposed to this very short-sighted destruction of millions of years of unique wildlife, an important part of our heritage please write to your local member of parliament and The Rt Hon Malcolm Fraser, Prime Minister, House of Representatives, Canberra 2600. You could also write to the Tasmanian Wilderness Society, 155 Liverpool Street, Hobart 7000, for further information or the address of the closest TWS branch to you.

Fleur Stelling
'Carlsbrook'
TABLE TOP
via Albury 240.

Feedback Link-Up Feedback

Dear GR People,

I am a recent convert to your magazine and am now a regular visitor to our only health food store. On one of my visits I came across a little book which has completely changed my kitchen and my cooking. If you are like me and have often thought about eating and cooking health foods but never really knew where to start, you may find this book will change your life too. It's called *Confessions of a Sneaky Organic Cook* by Jane Kinderlehrer, 1971, by Rodale Press Inc. The New American Library Inc. 1301, Avenue of the Americas, New York 10019. This little book is very 'readable', amusing and helpful - just like *Grass Roots*.

**Petina & Mike Harris,
Box 52,
CARNARVON 6701.**

Dear Grass Roots Readers,

My wife and I are asking all people who feel the need to preserve the wilderness areas left in Australia to show your support for The Tasmanian Wilderness Society in its fight to halt the building of an unwanted dam in the wilderness area of S-W Tasmania. Letters to the Prime Minister and donations to The Wilderness Society will help halt this destruction of a unique and magnificent area. My wife and I will be joining the blockade to halt the dam in January when the workers return from their holidays. This matter is urgent and needs every Australian to help in any way they can.

**Marcus & Birte Anthony,
8 Wadley Street,
NEWNHAM 7250.**

Dear Fuel Stove Experts,

Would anyone with any hints on the method, i.e. damper control, shelf positioning, of cooking on a fuel stove or the name of any old books on this subject please write to me.

**Carolyn Davis,
297 Woronora Road,
ENGADINE 2233.**

Dear Everyone,

Help!! Our ginger beer has been exploding all over the place leaving a great smell and sticky mess. We started making ginger beer after reading David Bell's article in your *Bumper Book*. The recipe makes a wonderful drink but not being a large family we could not drink it all in two weeks. Then the stuff in the bottle either took 15 minutes of our time gently prying off the seal or fizzed so much you ended up with 2 inches left in the bottle. What are we doing wrong? Is 1 1/2 lb of sugar too much or are the raisins doing their job too well? I've re-read the article but can't find anything there that I may have left out. Can anyone please help?

**Terri Schonewille,
285 Settlement Road,
COWES 3922.**

Dear Readers,

We are looking for anyone who can supply us with small quantities of these grains from time to time - say 5-10 kg lots:

Avena varieties - oats, large sweet types.
Panicum miliaceum - common millet.
Oryza variety - rice, wild type.
Secale cereale - rye.
Setaria italica - foxtail/Italian millet.
Sorghum bicolor - kaffir corn, African millet.
Triticale varieties - wheat x rye
Triticum - wheat, red, large sweet and soft types.
Zea mays - 'harlequin' variety - corn.
Zea mays - 'Indian corn' variety - corn.
Zea mays - 'multicoloured pierrot' - corn.
Zea mays - 'strawberry corn' - corn.
Zizania aquatica - Indian rice, tuscanora rice.

**B. & B. Marschner,
P.O. Box 351,
PT. PIRIE 5540.**

Dear Readers,

Someone wanted a good rhubarb recipe. This one is wonderful (we can't get enough rhubarb) and extremely easy.

Rhubarb Champagne (non-alcoholic)

1 kg rhubarb, sliced thickly
1 1/2 kg sugar
3 lemons sliced
7 litres water
3 tbsp white vinegar

Combine all ingredients in large plastic or crockery container. Stir and leave, covered with cloth, for 4 days, stirring daily. Strain and bottle, sealing tightly. I use 1-litre lemonade bottles with screwcaps. Leave for 2-3 weeks before drinking, and you have a lovely bubbly, pink drink, very refreshing. The redder the rhubarb, the pinker the drink.

Rita Summers.

Dear Grass Roots,

Re chilblains (GR 34:6). Even though it does seem unpleasant, urine on chilblains does work. A much nicer remedy though is camphor and kerosene. Just crush a cake of camphor into a bottle or jar, add a tablespoon of kerosene and allow to dissolve. Rub into the chilblains and be amazed as to how soon they have disappeared. Camphor is used in medicine as a sedative, as an antispasmodic in liniments etc.

**Jerry Webb,
Box 24,
BOGAN GATE 2876.**

Dear People,

Would anyone have ideas for ways to use bumper crops of broccoli. Ours crops for ages - a few plants allowed to seed ensure a lasting supply but we need new ideas for use.

**Margaret Theobald,
P.O. Box 240,
ESPERANCE 6450.**

Dear Readers,

Those of you worrying about alternative energy sources may be interested in the following thoughts which are based on 8 years experience living in the bush with my daughter, now 12 years old.

Lights: Aladdin lamps - silent, beautiful, good light, still purchasable new, but older ones are better. Our seven Aladdins use about 1 1/2 drums of kero a year.

Fridge: Small, ex-caravan, gas - perfect for 2 people.

Hot Water: Junkers instant gas - no need for storage tank or complicated plumbing or for lighting stove.

Cooking: Two-burner gas stove with grill plus old IXL wood stove; 2 x 100 lb cylinders of gas bought each year.

Ironing: Tilley kero iron - still available new. My kid uses it without any trouble.

TV, record player, 12 v lights in bathroom and daughter's house - all powered from car battery which stays in the car - is plugged into our system at night. Battery charged via car alternator. In 2 years our current battery has never gone flat. Battery will run 3 globes plus TV without any trouble. If possible just park your car on a hill or install two batteries in the car. N.B. Run the heaviest cable you can find from car to house.

Water Works: One 5-hp fire pump for general water movement; we use ours to fill 1500 gal tank on high stand with dam water which I clean in the tank by adding some lime when pumping. This tank supplies water for everything except cooking and drinking. We wash our clothes at the laundromat.

We are lucky to be near a flowing river. I pump from a small rapid in the river with a water-powered paddle-wheel which drives an old piston pump. This 24-hour a day machine is pumping 200 gals/day to a head of 270 ft along 600 m of 1 in polypipe without any trouble.

We live 1 1/2 hours from Melbourne and visitors are welcome.

**Rod Parker,
Box 21,
MEREDITH 3333.
Ph: 052-861-331.**

Feedback Link-Up Feedback

Dear People,

I would like to comment on several sections in a recent *GR. Helping Hand on the Farm* really saddened me – so many youngsters have the urge to seek a Grass Roots existence. It seems that they are so starved of it that when they find themselves in it totally, they can't cope and switch off – rather like the starved person who has to be fed small morsels at first.

Re Avril and Aileen of Merton in their letter saying that renting is a good alternative – how I agree. I live in a rented house with an average sized garden – the owners are so delighted that the garden is cared for they are keen to help by bringing plants and young trees. They say, 'Do what you like with the garden,' so I have made the vegetable garden in the back area which was all grass when I came. I've been here four years now and grow most of my vegetables and freeze or swap the excess. This holiday has been spent partly making sure everything is ready for spring – tidying up, digging a new bed using super compost and putting in a few early seeds. I wonder please could we have an article on water usage – for watering the garden when supplies are limited. Not only water conservation but the needs of specific vegies.

**Anne Poynton,
132 Doveton Avenue,
DOVETON 3177.**

Dear Fellow Readers,

Shortly, I will be moving to Cooranbong to work on the Adventist farm there before taking up studies for a Diploma of Applied Science (Nursing) at Avondale. I am a vegetarian, non-drinker, non-smoker and nature lover and am wondering if anyone has a cheap small farmhouse on some land for rent, or a mixed house in a similar situation in the vicinity that has a room for rent. I would be very pleased to hear from you.

**Lynda Norrie,
Narangba Road,
DAKABIN 4502.**

Dear Grass Roots Readers,

Like many Sydney office workers I occasionally contemplate a rural existence. My knowledge of this way of life is limited to a few books. I'd like to correspond with, and perhaps later visit, an individual or small group who live on a few acres to learn about the practicalities of their lifestyle. It would also be a good opportunity to make new friends. I'm a 32 year old single English guy who's main resources are an optimistic and practical outlook on life, a love of the outdoors and natural beauty, a creative imagination and a sense of humour.

**Sinclair J. Armour,
P.O. Box 54,
OATLEY 2223.**

Dear GR,

I would like to hear from a single 'grass roots' lady reader wanting to share her life with a placid man who tries to learn the mystery of life by observing nature. I live in a cow bales until the house is finished on green undulating mountain country in N-E NSW. I would like to share it with a similar-minded woman into living in moments.

**Ian Swift,
Barnes Road,
BARKERS VALE 2474.**

Dear People,

We are still looking and hoping to get a place; a basically-furnished house/cottage on an acreage (½ to 10 acres) of fertile, smallcrops land in the Sunshine Coast hinterland region. Water and an electricity supply needed and a place with a main road frontage or access. Between the two of us we can afford a reasonable amount for the rental or lease of same. We would welcome any letters and information from people in our area about places (used or disused farms) for rent or lease. We are now living in the Caloundra area since moving from Maryborough.

**Gary Arrowsmith,
C/- Post Office,
CALOUNDRA 4551.**

Dear Readers,

Living in the tropics (out bush in a small town), we need to de-lice and de-hookworm ourselves and our three children each three months. For head lice there are a few choices like Quellnon Foam or DDT emulsion, etc. For hookworm we use Combantrim. Does anybody know of any natural remedies for either of these complaints?

**Liz Gardiner,
Maningrida,
via DARWIN 5791.**

Dear Liz,

Although I can't help you with hookworm I can suggest a safe, natural alternative for head lice. Sassafras oil, made by Triad Health Products, is excellent for infestations of these little blighters. Rub a few drops of the oil into the scalp at night and by morning the lice are dead and eggs easy to remove. But, be prepared for the very strong smell of this oil. Sassafras oil could be ordered through health food shops. Triad Health Products are at PO Box 31, Asquith 2078.

Meg.

Dear Grass Roots,

Shortly our family is about to become three with the arrival of our first baby. Not only am I inexperienced in camping without the aid of tinned foods, becoming self-sufficient, but of course I've never coped with a baby before. In April we have 5 precious weeks in which to work on our land and the baby will be about a month old then. I would greatly appreciate any hints from GR mothers who've had to look after tiny babies out in the bush. I plan to breast-feed, but can't depend on that. We're going to take plenty of mozzie netting, but it will be the rainy season and getting colder in the year. Hope someone has a few hints as understandably, I'm very anxious, this being our first baby.

Here is a recipe for pickled onions:

- 6 lb pickling onions
- 2 pints vinegar
- 1 lb honey (or less)
- 1 medium packet pickling spices

Boil vinegar, honey and spice for 20 min, cool, pour over peeled onions in jars and leave for 3 weeks at least. It's easy, but cut down the amount of honey if they're too sweet.

**Julie and Alan Massey,
Flat 3/38 Hilltop Crescent,
FAIRLIGHT 2094.**

Dear Readers in GR Land,

I've not far to go to be in possession of the complete set of all the published *Grass Roots* – an invaluable reference library, but I do lack No. 7 which is no longer available. Can I appeal to any reader who does possess a No. 7 to either loan, give to, or photocopy it for me? I'll be happy to pay all reasonable expenses.

**Derek Simpson,
P.O. Box 603,
KALGOORLIE 6430.**

Dear Friends,

In answer to Anne Mason (GR No. 34) who requests information about seaweed – it is now possible to get a substance called Spirulina. It is an ancient food 2000 years old used by early tribes. It is nutrient rich and contains all the essential vitamins and minerals. It is a high protein food and provides instant energy and is said to be the food of the future. It came from the sea originally but is now grown in fresh water lakes. All health food shops have it or else from Lifestyle International. And also in answer to Marilyn D; another cold remedy is to stop all food for 24 hours and on the second day have only sips of fruit juice. My colds are generally gone in 2 days. Of course 5000 mg of Massive C – ascorbic acid – has the same effect but I find fasting just as good.

**Anne Vanzetti,
Box 44,
COOROW 6515.**

Feedback Link-Up Feedback

Dear Friends,

Where are all the North Queensland GR folk? Hubby and I are searching for our 'paradise', minimum of 10 acres, preferably more, with good soil, plenty of trees and natural spring creek. Isn't everyone? We are not looking at self-sufficiency, just simple living and preservation of all around us. We both work and find it so hard to get out there to search, so if anyone can offer help/advice we'd love to hear from you. We are 'open' as to area from north to mid-south Queensland, the only thing we don't like is the cold. Price range is \$20,000 plus growing steadily. If anyone requires info on this area please drop a line. Also has anyone a remedy for millions of weeny ants, also cockroaches?

Keep up the good work – love, laughter and happiness to all.

**Jan Power,
C/- P.O. Box 207,
BOWEN 4805.**

Dear Grass Roots People,

I have been a reader since issue No. 13 but this is the first time that I have written. In answer to Margaret and Don Fletcher (GR No. 33) on whitewash.

This is one formula – 2 pecks unslaked lime, 1 peck common salt, 3 lb rice flour, ½ lb Spanish whiting, 1 lb glue (clean and white), sufficient quantity of water.

Slake the lime in a vessel of about 10 gallons capacity; cover it, strain and add the salt previously dissolved in warm water. Boil the rice flour in water; soak the glue in water and dissolve on a water bath, and add to the mixture together with the whiting and 5 gallons of hot water, stirring all well together. Cover to protect from dirt, and let it stand for a few days, when it will be ready for use. It is to be applied hot, and for that reason should be used from a kettle over a portable furnace. (A peck according to the dictionary is 'measure of capacity for dry goods = 2 gallons'.

In reply to Dael Allison and Rick Houghton (GR No. 33) on stove blacking.

One pound graphite in fine powder, 1 oz lampblack, 4 oz rosin, 1 gallon turpentine.

The mixture must be well shaken when used and must not be applied when there is a fire or light near on account of the inflammability of the vapour. Graphite is the foundation ingredient in many stove polishes, lampblack which is sometimes added deepens the colour. Graphite may be applied by merely mixing with water and then there is no odour. The coating must be well rubbed with a brush to obtain a good lustre. I have not tried either of these myself but copied them from a book which belonged to my grandfather.



**Denise Musial,
CHIRNSIDE PARK 3116.**

Dear People,

I have recently moved from Wangaratta to the Scarsdale/Smythesdale area. I've bought a little 2 B/R house on 2½ acres and although it's not my dream bush block it's good enough. The area immediately around here has some lovely bush blocks for sale (if anyone's interested) but my block and the neighbouring ones are completely bare. As soon as I finish the fencing I'll be planting as many trees as I can as the wind is rather busy around here.

I have two children – Ben nearly 5 and Jacqui 2½. I don't know anyone in the area so would love to meet any other GR readers in the area.

For Margaret and Don Fletcher who requested a recipe for whitewash. I found this recipe in the book *Another Way of Living* by Jacques Massacrier and hope it is of help.

The cheapest and fastest way to deal with the upkeep of walls is to whitewash them with lime, both inside and out. Lime will protect them, keep off insects and kill bacteria. Put the quick lime in a pail (metal, wooden or earthenware, not plastic). Cover with water and stir with a wooden stick. The mixture will heat and come to

the boil. (Be careful not to let it splash on your skin or near eyes). As soon as the mixture is smooth add more water – ½ gallon per 1 lb of lime.

It may be used while still hot – it's more effective but dangerous. Make sure that you are well covered and wear glasses. I prefer to prepare it in the evening for use the following morning – it doesn't burn as much but protect your eyes. Spread it on the walls with a long-handled brush with soft bristles. The results are not immediately apparent. In damp weather you may have to wait 12 hours before it whitens. You can add a little washing powder – this will bring out the whiteness.

Don't use boiling water or this will delay the chemical reaction and you will have to wait till it cools down before adding the rest of the water.

Add 2 lb of aluminium sulphate to give added resistance, especially for use on outside walls.

**Sue, Ben & Jacqui Brooks,
Post Office,
SCARSDALE 3351.
Ph. 053-428-613.**

Dear Fellow Readers,

Would any readers be able to help us find some information on log kit homes? We are very interested in them but we are not sure where to look for the run down e.g. price, contents, etc. If any readers have built a log kit home please write and let us know how you found them. All letters will be answered.

**Kerrie, Gary & Leigh,
C/- 77 Grinsell Street,
KOTARA 2288.**

Dear Grass Roots People,

I am a lay-midwife from the Deloraine area in Tasmania. Women here once had to travel to either Launceston or to Devonport (one hour's drive) to the nearest maternity hospitals. Many women felt disappointed with the kind of births they experienced. Nowadays we have three alternatives which is a great step forward.

Home birth is one option. Many women choose to have their babies in their own homes with people they love and feel close to. This can be done with a high standard of safety, skill and hygiene under the supervision of a midwife.

The Devonport Birth Centre is the second option. It is situated inside the Mersey General Hospital. It took a great deal of effort and energy on the part of many people to get this opened and functioning. I see it as a 'halfway house' between birth in the labour ward and birth at home. At the Birth Centre you can take your own midwife to supervise the labour and do your own thing.

There is also the option of hospital birth. Ask around, there are many women who can tell you how they found that. I realise that many women readers of this magazine don't have these alternatives to choose from and that is truly a shame. I cannot overstress the importance of women being permitted to give birth in the place and manner of their own choosing.

**Effie Jones-Cantlay,
RSD 71 River Road,
REEDY MARSH 7304.
Ph: 622-867.**

Dear Helpful Readers,

I'm looking for a pattern (or source thereof) to make a baby sling – something with which a Mum or Dad could carry a baby from newborn to a sizeable age (say one – perhaps even two years of age) would be great. The simpler to make, yet more effective or reliable the end product is, the better. I am truly grateful for any help anyone can offer even if you recommend or weigh up the pros and cons of any commercially-made slings.

**Rosemary Madden,
7 Wilson Street,
TERANG 3264.**

Feedback Link-Up Feedback

Dear Readers,

A few friends and myself have recently formed a club for single naturists. We decided to form a group for single people (mostly aged between 18-35) who enjoy the freedom of constrictive clothing, but who can't join the family clubs because they haven't got a partner. We don't have any grounds, but we hope to organise outside venues such as sauna and spa nights, swim nights and beach outings. We would like to hear from any people living in the Brisbane area who are naturists and would like to be part of our group. They must be willing workers who want to help in group outings and don't expect to have it all laid out for them.

**John Carpenter,
2/30 Prospect Tce.,
KELVIN GROVE 4059.
Ph: 356-0148.**

Dear GR Folk,

Can someone please help me? I have worn bandannas for the last 15 years - first as a fashion accessory in the late 60s, then as a natural garment and part of my work clothes. They were the three colours that were then currently available i.e. red, yellow and blue. They became for me a symbol of the freedom I have and also 'my trademark'. However their extreme frayed frailty has now rendered them unwearable and I have been forced to put them aside. Attempts to replace them in Glen Innes and other regional towns has proved fruitless. I went to Sydney to find the supply had totally dried up. My plea is: if anyone knows of a store which still has bandannas in stock, I would be pleased and grateful to send a postal note covering cost of goods and postage to enable you to buy them and send them on to me. I would be equally grateful for the chance to buy good clean secondhand bandannas from anyone who would like to sell same. I am open to suggestions as to 'cash money' or barter and will answer all letters. This letter may sound funny but they now have a sentimental value far in excess of their real value.

**Andrew Hardwick,
P.O. Box 134,
GLEN INNES 2370.**

Dear Grass Roots People,

We are planning a camping trip through Victoria and NSW and would like to meet 'crafty' folk. We enjoy a wide variety of 'country' crafts, especially spinning, weaving, natural dyes, herbs and soap. If anyone would like to share ideas, or can suggest places to visit, please write and we will answer all letters.

'Dillon' always chooses the homemade dog biscuits (GR 33) in preference to the commercial ones. They're nutritious, easy to make and cheap. My favourite soap book is *Soap: Making It, Enjoying It* by Ann Bramson. Workman Publishing Co.

**Judi & Martin Smith,
29 West Tce.,
LAURA 5480.**

Dear Grass Roots Readers,

I must write this letter as a warning to any other unsuspecting readers. I recently used Telemin Plus to worm a horse. I am not in the habit of using this paste as I don't like any chemicals used on the animals. But as we do have botflies to contend with I use the paste once a year. At other times I use linseed oil and oil of turpentine. Also cider vinegar used in the feed daily will help reduce the number of worms. The horse in question is not easy to handle on my own so instead of all the drama I thought I would take the easy way out and put the paste in the feed. He ate most of it and then tipped the rest on the ground. I thought no more about it and when I saw hens eating the spilt pollard, I wasn't concerned as they usually clean up anything the horses leave.

The next morning when I went to feed the fowls and found most of them dead, I was quite mystified, then I remembered them eating the pollard. I asked around and found out that was the cause of them dying. This paste is quite lethal. It is used as per so much per body weight and when you think of the difference between the weight of a hen and the weight of a horse you can see why they died. So I have learned my lesson

the hard way and I hope I can save someone else the loss. If any reader has the answer to botflies the natural way I would be very pleased to hear from them.

I will add, I still have accommodation for a gardener. It is a share room share family situation. A male of any age who is interested in the garden and animals is all I ask. Hope someone would like to write to me about it in the near future.

**Jan Barry,
92 Camrose Street,
CAPALABA 4157.
Ph: 245-4230.**

Dear Readers,

Here are two recipes for whitewash, asked for by Margaret and Don Fletcher, in the October issue:

1. For general use (inside and outside) on sheds, fences, etc. either wood, glass or metal surfaces.

Dissolve 2 lb common salt in a 10 qt bucket, three-quarters filled with water. Stir well; when all salt is dissolved add slowly 10 lb Limil, and keep stirring until it's the consistency of smooth cream. Cover the bucket and allow to stand overnight or a few days if possible. When needed stir thoroughly and add sufficient water to make a good workable wash. One oz of alum added to a gallon of this helps prevent rubbing but is not essential.

2. For masonry surfaces such as brickwork, concrete, stone, etc: Make a mixture in the proportion of 50 lb of Limil, 25 lb of grey or white cement and 5 lb of common salt. Stir mixture in with water until the required consistency and the salt is fully dissolved. Make up only enough to ensure that it will be used within one hour. Whitewash is best applied thinly, then a second coat next day. Whitewash goes on 'clear' and dries white. Earth pigments, which can be bought at hardware stores can be used to colour whitewash.

**S. Fry,
C/- Post Office,
BALLAN 3342.**

Dear Folks,

Teaching in the country has many natural rewards but alas, I'm lacking one important aspect in my life. Is there a gentleman out there who could handle my slightly zany but together nature. I love dancing, am involved in the local drama group, and am concerned for the environment. I enjoy travel, kids and the country lifestyle. I come from the city originally but have spent nearly five years on the north coast and I love it. I am 26, fairly tall and don't smoke.

**Roslyn Barker,
'Mountain Home',
Burrell Creek,
via WINGHAM 2429.**

Dear Grass Roots,

Last time I wrote I had just acquired a 4-shaft loom and was having fun learning to use it. Well now I am really sold on weaving and have just finished a skirt length for myself. I have made it up and am very pleased with it. I have also woven two baby blankets. When I first got the loom I really had nowhere to put it other than on the dining-table which was rather a bother as every time we had a meal we had to lift it off. So we built a shed up the back garden which is known as 'Granny's Loom Room'. We bought a prefabricated garage but instead of the usual garage door I have an ordinary door and a window in the end and another window on the side so whilst I'm working there I can look out and see the trees and birds. We still have dozens of birds in the garden and they certainly keep down the wogs, especially the butcher birds and magpies. We were very excited recently to find King Parrots in the garden - we haven't had them before. I hope they stay for they are very beautiful with their wonderful scarlet and green coats.

**Antoinette Hill,
27 Calvert Ave.,
KILLARA 2071.**

Feedback Link-Up Feedback

Dear Readers,

I would like to hear from anyone who could tell me about the minimum nutrition needed for healthy survival. I am vegetarian, 35 years of age, and 3 kilos overweight. Sometimes I feel as though I could probably exist on only a few mouthfuls of food a day, but I have been afraid to try this because we are always told that a balanced diet is needed, also that we must have a certain daily intake of vitamins and minerals. Is it possible to live on only fruit? What is a good way to lessen appetite and get rid of a sugar addiction? The quality of the food I eat is generally good, but I do occasionally have an irresistible urge to eat a chocolate or an icecream. Also I have cut out eating anything after 5 p.m. I would appreciate any help with this problem as it all started when I returned from Israel 11 years ago. I immediately put on two stone in two months and the rest over the next 10 years.

**Helen Mills,
18 Welch Street,
CLONTARF 4019.**

Dear Folks,

Picked up your magazine the other day for the first time and thought I could pass on some useful hints. I am in my mid 40s and travelled most of the world.

For Chris and Liz Smith – before building in earth in an area where there is the possibility of local authority interference, get the advice of a young and sympathetic architect on how to word and present your plans in the event of repercussions.

For Deborah Kaplan – use whatever local clay that's closest to hand for your wattle and daub. Not too sloppy and just smear it on if you've already built a framework of wattle and building up the thickness with successive layers of mud. But remember, you *must* have overhanging eaves or roof to protect your walls from rain.

For K.S. Herrman – (a) refrigeration without electricity and gas. A Koolgardie sale is about the most practical. In essence a chicken wire cage of any size with an inner and outer wall also of chicken wire of 2-3 inches cavity. Fill the cavity with charcoal and place sacking over it all. Have a water trough round the outside bottom of the cage in which the bottom of the sacking sits. This keeps the sacking permanently damp and the contents of your Koolgardie safe cool. For the benefit of readers in hot areas, an extension to this is a spinnifex or bower shed which is no more than a hollow walled frame of chicken wire into which is packed spinnifex or similar vegetation. Running round the top of the walls you have a perforated garden hose. Walls kept damp, air blowing through is chilled. I am not exaggerating when I say I have known the outside temperature to be 110°F and the inside temperature such that you need a blanket.

(b) Yes, rammed earth floors are successful in not only a shed but also living quarters but they are improved by several coats of linseed oil.

Anyone passing up the west coast is always welcome. Just mention my name – the town of Shark Bay is sometimes also referred to as Denham. I have built with just about every known material and method going plus a number of clues for surviving in a low rainfall area.

**Tim Hargreaves,
SHARK BAY 6537.**

Dear Readers of Grass Roots Magazine,

A friend has recently brought to my attention a letter appearing in an issue of GR concerning the raising of the guinea pig as a meat animal. I am an animal technician and veterinary nurse and am currently completing my research into this matter and if any reader would like a copy of the results I would be happy to supply them (send a dollar note to cover photocopying costs). I would suggest caution to anyone thinking about raising the guinea pig for meat as there a number of problems in the husbandry of the animal which need to be appreciated and overcome. One point which must be stressed is that the guinea pig is *not* and efficient converter of food to meat. My research currently suggests a bodyweight-to-food conversion ratio of about 1:7 (i.e. for every gram of bodyweight, 7 grams of food is needed). This compares quite favourably

to the food conversion ratios of all other domestic farm animals. However in some situations the guinea pig can be a very useful provider of animal protein, especially where there is an abundance (and I really do mean an abundance, GP's are voracious eaters) of green feed and labour time, and where foolproof protection can be given against predation by domestic carnivorous animals (easier said than done). I would look forward to any person interested in the GP as a meat animal getting in contact with me, either to get a copy of my research paper or to offer me advice on reader's own experience in this area.

**G.R. Dean,
P.O. Box 888,
FREMANTLE 6160.**

Dear Readers,

We are interested in growing herbs (especially comfrey and lemongrass) on a commercial scale and we are looking for a market. We were told an advertisement appeared by someone requesting to buy as much as could be offered so we'd be grateful if you could put us in contact with them.

**Kay and Sean Ryan,
1 De Serio Road,
Cedar Pocket,
via GYMPIE 4570.**

Dear Grass Roots Family,

Congratulations on a marvellous magazine. I can't wait for the weeks to roll by till the new one is due. In the meantime I read and reread the ones I have. I have only one grumble. I wrote to a lady in Gosford re penfriend but have never heard from her. I am always open to anyone interested enough to write to me. I love animals, music and general topics. I spin, sing and write letters. All mail will be answered.

**Ida M. Browning,
11 Francis Street,
WAIKIKI 6169.**

Dear Friends,

Could anyone please help me satisfy my soap-making urge by sending me some fairly simple recipes (preferably step-by-step). Until the time comes when I can live a self-sufficient life in some beautiful untouched part of the country, I would like to learn how to make many other similar things, so any other tips or recipes would be much appreciated.

**Sue,
820 Hampton Street,
BRIGHTON 3186.**

Dear People,

There was an inquiry in GR 31 about land at Mt. Tamborine. Be careful as a lot of the land is under future resumption orders for a dam – I think it's the Wolfendamb. Proposed resumption time – 25 years. You can get copies of the proposed dam area from Government Water Board – they will also tell you if you have lot numbers, etc. Also some blocks, although above high water mark of dam will be resumed for catchment area and some blocks not under resumption will have their access cut off by the dam. Certain areas there have been sprayed with defoliant for quick clearing. Check surface and underground water carefully as some of it is lightly mineralised and only suitable for cattle. Lovely area tho'.

For the people who were asking about Timor ponies – I made enquiries two years ago re Timor ponies through the WA Pony Registration Book and various clubs and breeders. The answer was, 'no pure bred Timor ponies exist in Australia today.' They went out with the camels and donkeys and like those were either slaughtered or turned out to breed wild, the difference being the ponies interbred with other breeds and disappeared as a breed of their own. They cannot be imported from Timor now due to disease control regulations. Instead try the Australian pony – they are a registered breed, about the size you require and were partly bred from Timor ponies I believe.

**Trish,
P.O. Box 164,
FREMANTLE 6160.**

Feedback Link-Up Feedback

Dear Friends,

Here is something different for you to bake this week for bread. Have you ever tried Finnish ryebread called 'Reikaleipa'? Try it. The following ingredients will make one flat round loaf.

- 1 ¼ cups warm water
- 1 sachet dry yeast
- 1 ½ cups medium rye flour
- 1 ½ tbsp brown sugar (or honey)
- 2 tsp salt
- 2 tbsp melted butter or oil
- 2 cups all-purpose flour

First mix yeast with warm water. Cover and let stand 5 min, then mix in rye half cup at a time, mixing well with wooden spoon. Mix in sugar (if using honey, melt with warm water) salt, and melted butter. Now beat well for 2 min. Slowly add all-purpose flour. Knead for 8 min until dough is elastic and 'almost' non-sticky. Remember the rye flour will never behave as well as wheat flour. Cover with towel. Let rise for 50 min. After this, work out the air bubbles, turn oven to 190°C. Prepare flat baking sheet. Now, with rolling pin roll dough into flat round shape about the size of your baking sheet. With glass, cut a hole in the middle and with knife cut slices into bread. Using a fork, stab flat loaf full of holes. Place baking sheet into hot oven and bake at 190°C for 1 hour. Serve hot or cold.

Here is a garlic spray for your garden: 3-4 oz chopped garlic—soak in 2 tbsp mineral oil for one day. Add 1 pint of water with 1 tsp fish emulsion in it. Stir well. Strain. Store in glass container *not metal*.

To treat leaves for preserving: make up a mixture of 1 part glycerine to 2 parts of boiling water (enough for half jam jar). Break a branch of coloured leaves and stand in the solution. Leave till fine veins in leaves and the leaves have become silky. Pick off leaves and leave to dry. Put into plastic bag. They will keep well. You can now make your own greeting cards, pictures, etc.

**Maini & Tom Ramstrom,
102 Mortimer Street,
YANDERRA 2574.**

Dear Grass Roots,

I had a letter published in GR 31, to which a guy from Darwin replied. The letter was sent to my home address in Tumorrana NSW. I was travelling around Australia at the time and my mother sent the letter on to me (funnily enough I was in Darwin at that time) but unfortunately I did not receive it. If the guy who wrote to me reads this, I would love to hear from you.

**Cheryl Bousfield,
C/- 60 Margaret Street,
ASHFIELD 6054.**

Dear Friends,

Are you now producing alcohol fuel for vehicles? We want to produce alcohol fuel in the Cairns area. Would like to meet/correspond with successful producers.

**R.L. Bradley,
P.O. Box 1817,
CAIRNS 4870.**

Dear Folks,

We three live in a palatial two-storey owner-built A-frame style home in the peace and quiet of a spring-fed bushland valley head 55 miles south of Hobart. We are sheltered from most wind and despite occasional snowfalls we have only rare frosts. Our terraced slopes support an array of 70 fruit trees including citrus, as well as grape and passionfruit vines and various berry fruit. This solitude with its birds and bees is lacking only for need of a family or extended family. All single parents on the land will know the difficulty of socialising or getting out to meet other like-minded souls. We three are Emerson (4) an ever-inquisitive Piscean, Petreanna (7) a creative, dancing and music loving Leo and Daddy or Arthur (36), an outdoor-type Taurean with semi-academic background and spiritually meditative leanings. Our house

though warm and comfortable with alternate and conventional energy lacks a woman's finishing touches and warmth and importantly, a mother and adult companionship. However there is room for more children or a couple instead or even another single dad. Apart from bees, honey and orchard, herbs, organic gardening, food preserves and freezing, goats and chooks. Dad has varied interests in all things botanical, conservation and wilderness, Tasmanian timber, leadlighting, photography and recently, alternate schooling. Home and lifestyle are supported by part-time shift work and small sales or barter of produce.

**Arthur Clarke,
P.O. Box 4,
DOVER 7116.
Ph. 002-981-107.**

Dear Grass Roots,

I am hoping that someone can help me with information on recycling old newspapers. I'd like to make writing paper.

**Shelley Knight,
7 Jacaaba Street,
HAWKS NEST 2324.**

Dear All,

Alison and Max (GR 32, p. 98) were wondering about what happens to children who grow up in the bush, especially when they reach working age. When we came to live in Australia 23 years ago, moving out to a house quite a long way from anywhere with no mod cons at all, many people told us we were mad to go to such a place with a young family (four under four). 'What are you going to do when they have to go to work?'

Certainly the advantages when they were young far outweighed the disadvantages. The school bus collected them and dropped them back each day. They grew up pretty healthy and in touch with the things that mattered. Occasionally the absence of a TV caused problems with homework that had to be done from the TV, but this was amply compensated by the large supply of books we had. All the children jumped a grade at primary school, wholly I think because they were so articulate and read so much. They learnt to ride horses, drive cars as soon as their feet reached the pedals, handle sheep, cattle and even bushfires. When the time came for jobs, things were a bit more hectic for a few years. Our eldest girl did a stint at Taylor's College in town and had to be taken in once a week, and the eldest boy had to be taken to and from the train each day to attend a sign-writing apprenticeship. In fact until they each in turn reached the age when they could buy and drive or ride wheels of their own, we just ferried them as necessary.

When the children were small, and until they became fashion conscious, I made everything they stood up in bar their shoes, and they were quite neatly turned out. As I look around now, they all seem to have found themselves a niche in which they are happily and busily engaged. One has a growing young family and the others are making their ways in jobs of their choice, and I do not feel that the lack of a town environment in their youth has hampered them at all. Some of them have had a struggle to find work at times, but being willing to try anything they did not usually spend much time out of work. The youngest's jobs have ranged from being a ranger, welder, storeman at Coles, to his present one in a horse complex. They breeze in to see me at intervals, usually when least expected, and I feel that we did the right thing.

**Pat Coleby,
HARCOURT NORTH 3453.**

Dear Grass Roots,

Are there any readers who could give me information regarding a 'hemstitching machine'? They were popular 50 years ago and they were used for finishing frills, hems, handkerchiefs, crochet, and lots of other things. If anyone has one tucked away in an attic and would be interested in selling it I would be glad to hear from you.

**Clarice Willmann,
22 Wuruma Street,
SCARNESS 4656.**

Feedback Link-Up Feedback

Dear Readers,

I refer to your article in the October issue (No. 33) concerning home brewing of beer. It is unwise to use a plastic garbage bin for brewing because there is a cancer danger with the type of plastic used. This was given some publicity in the press last year. There are specific plastic containers for brewing which can be obtained from most health food shops – only these containers should be used.

**Peter Sutton,
93 Wareemba Avenue,
THORNLEIGH 2120.**

Dear People,

Going through some back numbers (GR 19 p.p. 80,81) I read a letter from Diane Linton re dyeing wool with the flowers of the soursob or oxalis. We had a session of dyeing with oxalis here a few years ago, using different mordants dropped into the dyepot, after cooking up about a bucketful of just flowers, and dividing this into several lots using copper sulphate, chrome, alum, etc. The alum lot was divided in two, and one treated to an 'after bath' of cold water with cloudy ammonia added, producing a rich dark brown. There were eleven colours altogether, some similar, some very different.

Does Diane ever wash fleece before dyeing? This can mean that there is no real need to have so much wool spun up beforehand. If the fleece is really clean I use Cold Power with cold water. Don't faint spinners, I have not spun dirty wool for about four years, nor combed or carded it! And I spin all day, every day, *crochet* and knit for various outlets. Also in the same Feedback there was a request for patterns for handspun garments. This need not be difficult if a little thought is given to making the 'test pattern' on about 25-30 st and 20 rows or so, with *the size needle to suit the thickness of the wool*. This means that the number of stitches is the ruling factor in any pattern used for the garment. So that you may use the smallest size in a multiple size pattern, disregard the size of garment, use the number of stitches stated, and adjust length to suit! What could be easier? To calculate the number of stitches needed, after knitting the 'test' count very carefully the number of stitches to 1 or 2 inches (even half a stitch is important here) and multiply by the inches around the hip, or where the bottom band comes to. Knitting the sleeves first is also a help if you are not sure of the outcome – not such a big thing to undo if not satisfactory. Also knitting on a circular needle if you can manage it, spreads the odd colours of coloured fleece around the garment and eliminates the bulky side seams. It is not generally advisable to knit handspun on smaller needles to achieve the right size – this can end up as a matted-up hard garment after a few washes, and using very much bigger needles does not help much either, as the result is often a sagging 'biggie'. Most people are not perhaps aware that wool can stretch as much as 17 times its length when wet, so what must happen when a wet jumper is hung up to dry? Better to spin out some of the water, or roll in a couple of dry towels, and lay out flat to finish off. I expect this letter will raise some 'howls' from some quarters, but not to worry – my garments sell well. Hoping to at least have sown some seeds in fertile soil.

**Lorna Dempster,
P.O. Box 114,
ST ARNAUD 3478.**

Dear Grass Roots People,

I would like to send my recipe for a vegetarian diet that I give my two German shepherd dogs. They are very happy and healthy with no ticks or fleas or any complaints whatever.

Dog Mash: Boil some of every kind of vegetable available in a large saucepan or boiler (not aluminium) with just enough water to prevent burning. I use my own organically-grown vegies – cabbage, potatoes, peas (dried as well as fresh), turnips, lettuce, parsnips and pumpkin. Boil till just tender, let cool and put through blender to make a mash. Add some skim milk powder, bran and pollard, and if you like you can add a little meatmeal but this is not necessary. Mix into a 1 gallon mixture of this mash approx. 2 dsp of medicinal sulphur (not garden sulphur). Mix thoroughly to a fairly thick mash. The dogs love it.

This mixture is also very good for fowls and baby chickens, although for chicks I make it very dry. My fowls do not have ticks, lice or any disease. I also put approx. 1 tbsp of Epsom salts in the 4 gallon water trough for the chooks or ducks. I hope these hints will be helpful to Henry and Jan. I also grow tansy herb near the dogs' kennels and throughout the garden. This keeps fleas away.

I have a sure way to be rid of warts, corns and callouses on the feet. Every morning I go around the garden and break off the young branches of milk thistle and apply the white milk to the wart on my finger, corns or hardened skin on the feet. I had a wart on my finger for about 30 years and since applying the thistle milk it has completely gone. The corns on my toes are going too. Julie Faithfull, I hope this works for you.

**Maybelle,
CURRUMBIN VALLEY 4223.**

Dear Readers,

I would like to hear from you. I am a keen letter writer with many and varied interests. We could learn from each other, exchange ideas on aspects of lifestyle and hopefully secure firm and lasting friendship – perhaps exchange holidays. All letters welcome.

**Miss Kym Williams,
Lot 2 Illaroo Road,
HOXTON PARK 2171.**

Dear Readers,

We have three beautiful acres of bush at Mount Nebo, about 20 miles from Brisbane GPO and here we plan to build. Our trouble is that we can't seem to find any mudbrick houses in or around Brisbane, consequently we are lacking local information. Do any readers live in or near the area and are you familiar with local council requirements, particularly relating to building in mudbrick? Failing that, does anyone know of any alternative builder of any description, as we have read a great deal on solar design, kit homes, etc., but don't know a non-conventional builder with whom to discuss our needs. Also is anyone familiar with raising chooks in a tick area? Any hints? And how do you buy comfrey?

**Sallie & John Gardner,
5 Maribor Street,
WESTLAKE 4074.**



Dear Friends,

There are so many 'roos in this country that if there were 1000 shooters in each state, they wouldn't shoot them out. There is too much inaccessible country for them to thrive in. Sure there are less 'roos since the drought. They have some sort of instinct that warns them of such things and they do not breed if a bad season is approaching. This is a scientific fact, not just my impressions. Australia has many national parks where wildlife is protected to ensure survival, so why not let the people in the bush make a living by culling, and also the farmers by growing crops and beef.

Annually 'roos cost the Australian public thousands of dollars in higher prices due to loss of production, not to mention loss of life and vehicle damage. It's a shame more ill-informed people would not take the time to thoroughly check these things out before condemning shooters. I've been a pro shooter and fisherman for years now, but conservationists have forced me out of a living with closed waters (to professionals only) and also by poachers stealing the catch and often our equipment.

By forcing people off the land, eventually everybody will end up in the city, queuing at the market for produce no longer being produced. All people should be more tolerant of the other's lifestyle and think carefully of the long-term repercussions of their actions before condoning many of these new laws.

**Jim,
142 Thurla Street,
SWAN HILL 3585.**

Feedback Link-Up Feedback

Dear GR People,

Ever since our marriage 12 years ago, we have dreamed of becoming self-sufficient. To help this dream come true we spent four years in a mining town in the N-W of WA where the wages are high. We saved very hard and read as many books as we could. Just over a year ago we came to Victoria and bought a small property (7½ acres and W/B house). We have done a lot of work on the house and land and are gradually becoming self-sufficient. The vegie garden (organic of course) is sort of established, we have a house cow who has recently given us a lovely heifer calf, one Saanen goat, six sheep, chooks, geese and a steer. The cow provides all our milk from which I make butter, cheese, and icecream. I bake all our bread, grow vegies and preserve, pickle or jam all the surplus. Soon we should be eating our own meat.

Keith, my other half, decided to take a local job at half the pay he was getting in Melbourne. At first we thought we would be able to manage, because with Keith at home more we would soon be able to live more self-sufficiently and wouldn't need the money. But it's not working out that way – the more we are producing, the more money problems we are having – the house loan has gone up three times already. We are now at the stage where we are thinking of renting the place out and going back north for a few years. I'd like to know how other self-sufficient people manage when they first set out on the road to 'freedom', and have you any handy hints for cutting costs? Also are there any other self-sufficient type people in our area that we could get to know and perhaps start a 'self-sufficiency help group'. We are a family of five. Keith 35, myself 32, Adele 10½, Ian 9 and Suzanne 4.

**Edwina Merrick,
Lot 29, South Rock Rd.,
NEWHAM 3442.
via Woodend.**

Friends,

We would like to hear from anyone living the good life in a rainforest area in Victoria for correspondence or a visit. Also anyone interested in shares of such a place. We are financial and independent non-drinkers and not into drugs. We are interested in living quietly and fairly self-sufficiently and maybe sharing with a like-minded couple. We are in our mid 30s with no children. All letters will be answered.

**Bea and Jim,
142 Thurla Street,
SWAN HILL 3585.**

Dear Grass Roots Readers,

While very few things grow in this arid climate, aloe vera, not only grows – it grows (or goes) 'mad'. Could someone tell me the remedial virtues of this plant? I have been told by satisfied users of its use on burns and for menstrual pain. What else?

As a swap, here is a recipe using the grow-everywhere 'asthma plant' *Euphorbia hirta*. It is a mucolytic and is useful in cases of asthma and allergic coughs. To 1 litre of water add 25 grams of dried plant. Simmer until the quantity of fluid is halved. The adult dose is 1 wineglass of liquid, sipped.

**Lennie Wallace,
Barragunda,
HUGHENDEN 4821.**

Dear Fellow Readers,

I must agree with the letters in Feedback which express the need for tolerance of others, their habits, beliefs, diets and so on. It is not *our* job to condemn. If we do not follow the same path as others, we go on our way, leaving them to theirs. If I may quote Thoreau:

If a man does not keep pace with his companions,
perhaps it is because he hears a different drummer.

Let him step to the music which he hears,
however measured or far away.

**Peri & Mark Coleman,
Private Bag 4,
MIDDLETON 7163.**

Dear Readers,

We are a small group that are planning to set up a rural collective. Our plan is to have a minimum of 20 equal shares of about \$5,000, which entitles the holder to at least 10 acres of personal land and a collective share in communal land and wilderness area.

We have about 15 people so far and are now looking for the land and a few more members. The land we are after needs to be east of the dividing range, no further south than Taree NSW, have permanent water and be about 400 acres, ideally of virgin forest. The amount of money we will have depends on the eventual number of shareholders, but around \$100,000 is envisaged. If you hear of something let us know.

If you are interested in becoming a member, write telling us what you are after and we'll send a copy of our proposals so far. Any suggestions will be welcome.

**Peter Lewis,
332 Melton Road,
NORTHGATE 4013.**



Dear Grass Roots Readers,

Would anyone be able to help me in converting existing recipes for cakes and biscuits using whole flour to wholemeal flour. I find if I use the same quantities the cakes are too dry. Should I use less flour or more butter, or what? Also, converting recipes using sugar, to honey. Would anyone have a copy of *The Book of Earthly Delights* I could buy or know where I could get one? Would anyone like to become penfriends? Steve and I are both 29 and our four kids are 10, 7, 2 and 9 months. We are still living in Sydney at the moment, but are making our move to the country (hopefully Tasmania) within the next 12 months. I'd love to hear from anyone who would like to write. My interests are all crafts, cooking, reading, herbs and striving towards a simpler and healthier lifestyle.

**Lynda Struthers,
179 Riverview Road,
EARLWOOD 2206.**

Dear Grass Roots Readers,

The main reason I am writing is to inform readers who seem to think they can buy 20 acres with water, not too cold, easy access, etc. for \$5,000 that they are mistaken (cooperatives notwithstanding). A mate and I spent 12 months and \$2,000 (petrol mainly) travelling around NSW and southern Qld looking for just such a block. Oh yes, we found acres for \$10,000 (40 acres) but bore water, hundreds of miles from large town, or under water at high tide or what we now call vertical acres (cliff faces). I don't want to put a damper on people who want to go bush but . . . We eventually found our block (40 acres), half hour drive from where I now live (just south Wollongong), for some \$55,000. Yes, it does have some vertical acres, it is not under water at any time and is almost unspoilt by man (uncleared). It has two permanent creeks, several soaks and a spring.

As for kero fridges – magnificent. Mine uses 5 litres (1 gallon) per week during the summer and will freeze on high.

I am now working on a DC (50 amp) generating set based on a 'Yanmah' 2 h.p. air-cooled diesel motor (being a qualified electrical engineer helps) with a set of 6 volt 400 amp-hour deep cycle batteries. Word of warning: Don't use car batteries. They're not designed for cycling – use proper deep cycle batteries. They are more expensive but last much longer.

By the way girls, I am single, 26 years old, interested in scouting, hiking and amateur radio. Not interested in yoga, drugs, cigarettes or nuclear power. Must go. Unfortunately some of us do still have to work so I better get on with it.

**Peter Laughton,
28 Immarna Avenue,
WEST WOLLONGONG 2500.**

Feedback Link-Up Feedback

Dear Readers,

I am writing to ask about land bought through a coop, on a \$3,000 per share arrangement for small fellows like me. Can anyone tell me how it works? We are a family of six – two boys, two girls and my wife Barbara. The land I am dreaming about would have to be not far from school and shops, small town, have creek on property or river frontage, in or not far from mountains. I came from a mixed farm in Ireland, back in the mid 50s. South Queensland, NSW or Victoria is where we would like to live. Hope someone can help me. Love *Grass Roots* – it allows one to dream.

**Don & Barbara Coffey,
C/- Post Office,
IRVINEBANK 4872.**

Hello Folks,

I have recently moved onto 10 acres where I hope eventually to become self-sufficient. My idea of self-sufficiency is to be able to make a living without working outside the property or accepting handouts. So far, I have a gravity-feed water supply, gardens emerging, and a machinery shed under construction. Meanwhile I live in a caravan.

This is my second time on the land, the first having succumbed to a divorce and property settlement and it is surprising how much easier it all is this time. It is great to be back as nothing else I have done has made much sense to me. There is only one thing I would like to change and that is that I am alone. Could it be that among my new-found fellow GR readers there is a lonely lady who would like to share her life with a sensitive, gentle, practical, energetic and unusual lad of 35 who has a wide range of interests including games (as opposed to sports), kids and their education, and 'what's-life-all-about-anyway', and who says what he thinks. I am a vegetarian and don't smoke tobacco. Anyone who would like to write or visit is welcome to do so.

**Jonathan Chance,
Horseshoe Creek,
via KYOGLE 2474.**

Dear Friendly People,

In reply to Tina and David Cinzio's request (GR 33) for a way to get the oil back into a fleece, I have been advised that if the fleece is placed on newspaper in the sun for a few hours, the heat will melt the oil in the fleece. If this doesn't bring the fleece up to standard another remedy is to mix baby oil and water 50/50 in a spray bottle and spray over the fleece. I have also heard that a fleece should be stored in either newspaper or calico bags, even an old pillow case will do, as wool retains moisture, storing in a plastic bag will eventually cause the fleece to harden and subsequently it will have to lay in the sun as above. Another hint is to never wash the bag which the fleece has been stored in, as all the oil which rubs onto the bag will assist a future fleece in retaining its oil. I sprinkle Epsom salts over the fleece once it has been placed in the bag as a moth deterrent. I wonder if any reader would have a pair of wool cards which they would be interested in selling. Please contact me as all letters will be answered.

**Pamela Mills & Graham Williams,
M/S 282,
COOMINYA 4305.
Ph: 075-668-314.**

Dear People,

Some time ago I wrote with odds and ends of information which I thought was worthwhile, but alas, one little snippet hasn't worked out as planned. I'm referring to the 'blackberry infusion' I made to relieve my dog's eczema. At first it cleared up the skin beautifully and it stayed that way for some time but eventually the itch came back and the potion didn't work. By this time the blackberry leaves had a yellow fungus-type coating on them so this may have been the trouble. Anyway, we're back to the vet again. Would any readers have ideas on how to counteract this most common of complaints without resorting to drugs?

**Pamela Weaver,
Box 265,
DONNYBROOK 3652.**

Dear GR People,

Sandra's soap (GR 33) sounds terrific. I might even get around to making some this time! But looking at the ingredients, I can't help wondering if it is really more economical to make your own, or just more fun. By the way, I have a book called *Self Sufficiency* by Bull Connors, which gives the recipe for making lye.

Home-made Lye

Make several holes in the bottom of a wooden or metal cask and cover the bottom with a good layer of pebbles or broken glass. Fill the cask with wood ashes made from burning hardwood branches, then pour water over the ashes into a container underneath. If the solution in the container is not strong enough, you run the stuff through the ashes again. With most of us running wood fires, that's got to be cheaper than buying caustic!

I am pleased to see that there is now quite a debate going about education. I agree wholeheartedly with everything Marion Pears said in her article on alternative schools. The sooner this option is the majority, the better. In the meantime, those of us out of reach of alternative schools must go on creating the right kind of home environment to combat the school influence. My children recently did a project on prehistoric animals, and on the usual requests for project material, I pulled out some material I'd been hoarding on Australian prehistoric mammals. He took it to school, and it transpired that this was the first mention made in the project of Australia! Most teachers in state schools really seem to think that history in Australia stops dead at Captain Cook. Obviously I will have to fill in this gap as well, along with the gaps on nutrition.

**Abigail Neville,
Lot AA,
Northern Road,
LUDDENHAM 2750.**

Dear People,

Members are needed for a cooperative permaculture community on an 80 acre site, which is to be formed into a trust. The permaculture plan for the property is interesting and challenging, and in many ways, quite different. It will be an alternative farming venture, as self-sustaining as possible but still earning an income. Main lines of industry will be: sheep, pigs, nursery, wine-making, production of fuels and oils, herbs, compost, mushrooms, earthworms, fish and yabbies, plus a host of smaller lines limited only by our imagination, and with our own shop to sell them. Housing would be in a mudbrick court. I would like this to be a Christian community but church membership is not essential. Must be non-smokers though (technical reasons). As we will be rearing animals for slaughter we might upset vegetarians (otherwise we would not object to them). As a permaculture community, it is in boots and all, total commitment. It will cost money.

**J. Alderson,
P.O. Box 72,
MARYBOROUGH 3465.**

Dear Grass Roots People,

My family and I are suffering all the anxieties and problems that many of you must have dealt with before making the break to a more satisfying lifestyle. Without having realised it, I guess I've been a grass roots person for a long time, having built our bluestone home and being capable of creating and maintaining it. My background is mechanical skills and practising 'live and let live'. I own a small city business with not a great deal of money behind us. We want to change to a rural life, and whilst maintaining grass roots values, we don't wish to live a subsistence lifestyle. To this end I would greatly appreciate corresponding with, or meeting people who have made the break, and are able by whatever means, to make a living out of a small acreage.

**Les Skinner,
Clare-de-Lune,
Mickleham Road,
GREENVALE 3047.
Ph. 379-5665 or 333-1648.**

HYDROELECTRIC POWER FOR ONE FAMILY

by Don Lawie, Babinda, Qld.

We live on two acres of land in the wet rainforest country of far north Queensland, 60 km south of Cairns. The Russell river flows northwards only 300 m from our house, and the Graham range rises to its greatest height of 700 m immediately behind us. The road to Babinda, our nearest town, has 6 km of dirt or mud — depending on the weather — at our end, and our nearest and only neighbour is 3 km down that road. The road ends at our place and from then on the land is pretty much untouched. When we had the chance to buy our little place in 1976, it seemed like gaining access to a slice of heaven. Peaceful country living, but close enough to town for me to take the children to school each day and to continue to operate my small pharmacy in town. Our family consists of myself, my wife Pauline, our son Duncan who is now 13, and daughters Marion (11), Helen (8) and Allison (7).

We were attracted to the place by its lack of reliance on municipal assistance. The Council road ended over a kilometre away, and rates were only \$30 per year. Household water is supplied via a 25 mm polythene pipe with a simple gravity feed from the bottom of an impressive waterfall in a small creek about 200 m from the house. Electricity came from a 10-hp diesel engine which ran a 9.5-kVa alternator at 240 volts, and used only about a gallon of distillate for four hours' running. Fuel for the diesel cost only 30 cents per gallon in 1976 (oh happy days!) and we found that it was necessary to run the engine for only nine or ten hours per day to keep the fridges cool and the hot water hot, plus supply all of our lighting and other power needs.

Unfortunately for us, 1976 was the end of the era of cheap petroleum fuel in Australia. By 1980, we were paying as much per litre for distillate as we had been paying per gallon in 1976. There was a definite limit to the economies possible to be made in diesel running time, since food began to spoil if the fridges and freezer were not run for long enough in our hot climate. Pauline had perfected the skills of breadmaking, milking, and kitchen gardening, so that our biggest expense became fuel for the cars and for the generator. When the diesel engine was overhauled the mechanic said it would be uneconomic to do it all again, giving the engine a life of three years. The time had come to make a definite decision on the alternative energy systems we had been considering since moving out here.

Solar power was not sufficiently proven at the time, and in any case we have so many wet days that we felt that we would have to fall back on the diesel too much. Our area is in the wettest part of Australia, with an official average rainfall of about 350 cm (140 in) per year, but an actual fall of about 500 cm (200 in) yearly since we moved here.

Wind power was a feasible alternative, since we have strong constant winds blowing along the river valley, but we felt that it was too expensive for the total power output available. Other drawbacks were the necessity to replace batteries every few years, and the fact that we are in the tropical cyclone belt and could be reasonably certain that a windmill would be blown to bits sooner or later.

Hydroelectric power had always attracted us. It is relatively silent (after years of a chugging diesel engine), it utilises natural energy without the need to destroy anything, and once installed it costs practically nothing to operate. We had the waterfall behind the house, and an engineer had made some preliminary measurements and advised us that our situation would be ideally suited to a high-head Pelton turbine installation.

The only problem was the cost, which was way beyond us until I had the good fortune to sell my business in 1979 and take a job as a labourer in our local sugar mill. I did shiftwork during the harvest season, grabbed all the overtime I could get, and worked as a locum pharmacist during the mill's slack season. After two seasons in the mill, we decided that if we sold our best car and liquidated all life insurances for cash, we would have enough to go ahead with a hydro installation, so we went firm on the idea in 1981.

We had been negotiating with Mr Jon Lemon, of Tamar Designs Pty Ltd, Deviot, Tasmania, specialists in the design and manufacture of small hydroelectric plant. After supplying him with as much detail as possible, Mr Lemon advised that we should install a 215 mm (9 in) bronze Pelton wheel, mounted on bearings and suitably housed, and coupled to a brushless, self-exciting, 10-kW alternator. Water supply would be by an adjustable spear valve, and power output would be controlled by an electronic governing system.

Before final design and manufacturing could begin, I had to supply some details of our requirements and situation. I drew a sketch map of the area, took some photographs, and calculated the length of pipeline from intake to turbine, volume of water available, pipeline diameter, vertical height from intake to turbine, and power required.

The pipeline length was measured with a string line: through the scrub from the head of the waterfall (where we were lucky enough to find a permanent pool), across two gullies and down a very steep final slope to a site in our back yard, from which the tailrace water could enter our storm-water drain and follow it to an overflow channel, then back into the creek itself. The distance from pool to turbine is just under 270 m (900 ft). The volume of water in the creek was estimated by installing a rough wooden weir in the creek bed at a narrow spot during the dry season, and measuring the height of water which flowed over the lip of the weir.

We decided to try to generate about as much power as the diesel produced — 7.5 kVa — so Mr Lemon advised us to put in a bigger alternator to give us a safety factor in case of overload by the wheel, and that a 100-mm (4 in) pipe would be necessary to provide such power.

Choice of pipe material presented us with many problems. Steel or concrete pipes seemed an ideal choice, but impossibly heavy to cart up our near vertical mountain. PVC in 100-mm size seemed most suitable — light and easy to join — but is susceptible to sunlight damage, and has to be buried when used as a pressure line. Our rocky slopes, sparse soil and multiplicity of giant trees and ground roots made any thought of pipe burial impractical. Heavy polythene-type pipe in 100-mm size seemed good also, but came only in 100-metre lengths at an exorbitant price — we would have been spending \$3000 to \$4000 on the pipeline alone.

We finally decided on 100-mm aluminium irrigation piping. It would withstand the pressure admirably, and came in 10-m lengths with simple connections; it was thus easy to transport, and it would be easy to replace damaged sections resulting from such things as falling trees. Each section has a 25-mm inspection hole and bung, meant for irrigation spray insertion, so that if we developed a blockage in the line it would be easy to find the affected section. We were quoted

Carting the lengths of pipe up our mountain in summertime was a killer. The connector hooks kept catching in vines, the long pipes kept jamming in trees, and what seemed so light on the open ground assumed a murderous weight after nearly a hundred metres of climbing.

way above \$50 per section for new pipe, so haunted the farm auctions on the Atherton Tablelands for months until we were able to obtain thirty lengths of good pipe at \$40 each, complete with irrigation sprays. We sold most of the sprays for the cost of transporting the pipes home (150 km).

The vertical height from intake to turbine — the head — was measured by using a 150-cm marked measuring stick, a string line, and line level. Starting at the intake site, I stretched out the string line until the level bubble was steady, then measured the distance from string to ground, and moved the string to the ground spot for the next step, noting the height of each step in my notebook as I went. The job took half a day to do, but was remarkably accurate in that I made the height 84 m, and the pressure gauge showed 85 m when finally installed.

The machinery was shipped up from Tasmania in early 1982, and I commenced work on the pipeline as soon as I finished work in the mill at the end of the 1981 harvest season. Carting the lengths of pipe up our mountain in summertime was a killer. The connector hooks kept catching in vines, the long pipes kept jamming in trees, and what seemed so light on the open ground assumed a murderous weight after nearly a hundred metres of climbing. My son Duncan did a great job guiding the tail end of the pipe as I towed it with a rope from in front, and it took us an hour per pipe to take up the higher ones, a hard and exhausting job. Fortunately the weather was fine, so we had only a few leeches in the scrub, but the scrub itch-mites were out in force, and the wait-a-while vines and spiked bushes seemed to know just when we had both hands occupied.

I experienced problems in installing bends in the line to take it over the ridges and gullies, since the only commercially

available bends came in 45° and 90° sizes, neither of which was any use. My plumber friend told me how to measure the bends and cut the pipes to size, and I then had to take each one to town to have the bends oxywelded in place by a most obliging tradesman — welding 30° bends in thin aluminium is a real specialist's job.

We had had an engineer's advice that each bend had to be bedded into the ground with concrete thrust blocks; I adapted this by drilling holes in each connection and tying them to convenient trees with fencing wire and Cobb & Co hitches. Have had no problems at all since!

When the pipeline was finished, I connected an irrigation spray to the bottom, plus a pressure gauge, and ran the water in from the intake. What a great sight it was as I came down the slope, to see the water jetting out like a water cannon, the kids capering about under the spray, and using it to shoot little clumps of guinea grass up to tree top height. Until then we had been working entirely on theory, but now we had proof that the water had the power and volume we needed.

The next job was to level a powerhouse site above the storm drain, pour a concrete footing and install the bolts correctly (at second try), and then hand-winch the turbine/alternator to the site on a sled made from the base of its shipping crate. The unit was lifted on a rough gantry, again

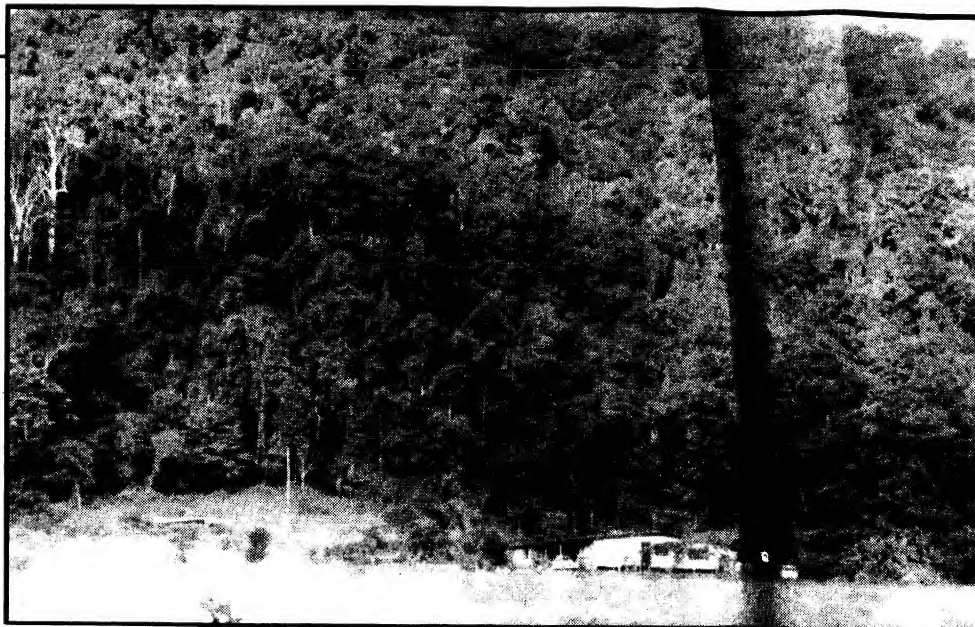
with the hand winch, and dropped neatly onto the footing, a good job for a man and a boy we told ourselves, since the gear weighs almost half a ton.

The next job was to dig a trench to the house for the wiring — 45 cm deep and 40 m long, another hard piece of work. The wiring was heavy mains wire run through underground conduit in the bottom of the trench.

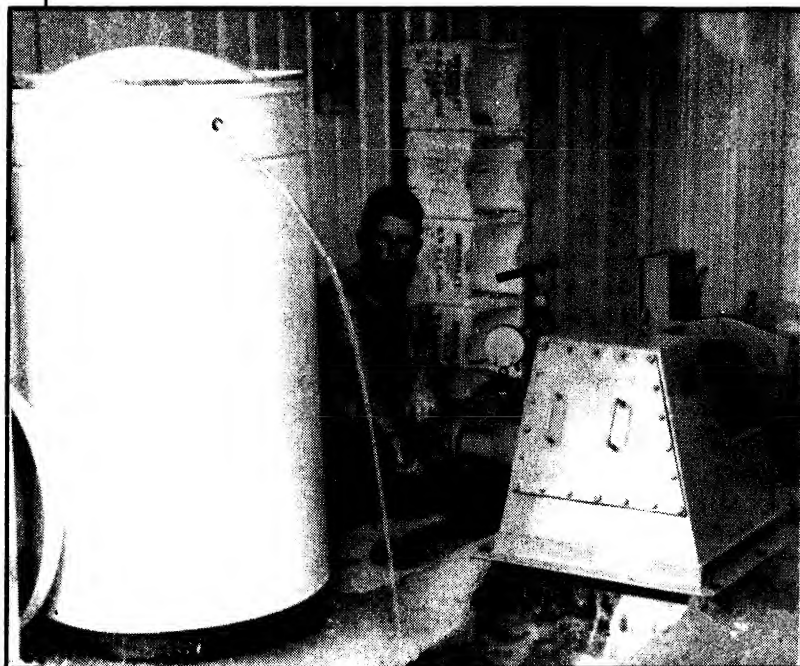
All the family then turned to concrete mixing and pouring, as we made a powerhouse floor and open concrete tailrace from the turbine to the drain. Around the turbine we built a steel garden shed with double doors on the tailrace side and a hole cut on the other side to admit the pipe. This shed has proven ideal for the job, with plenty of room for tools, air, and a strong wall for mounting the governor.

The governor manufacturers recommended that we install the water-heating elements which constitute the dummy loads into our domestic hot-water system, with an automatic dump valve in case of overheating, but I didn't want to butcher our system, which was in a pretty inaccessible area for such work; my plumber friend solved the problem by supplying an old hot-water system, into which he installed the heater elements, and I plumbed this into the turbine water supply line with a constant water flow through the dummy loads into the tailrace. This works well, and though this may seem to be wasting power, it is unneeded power in any case, and so of no consequence.

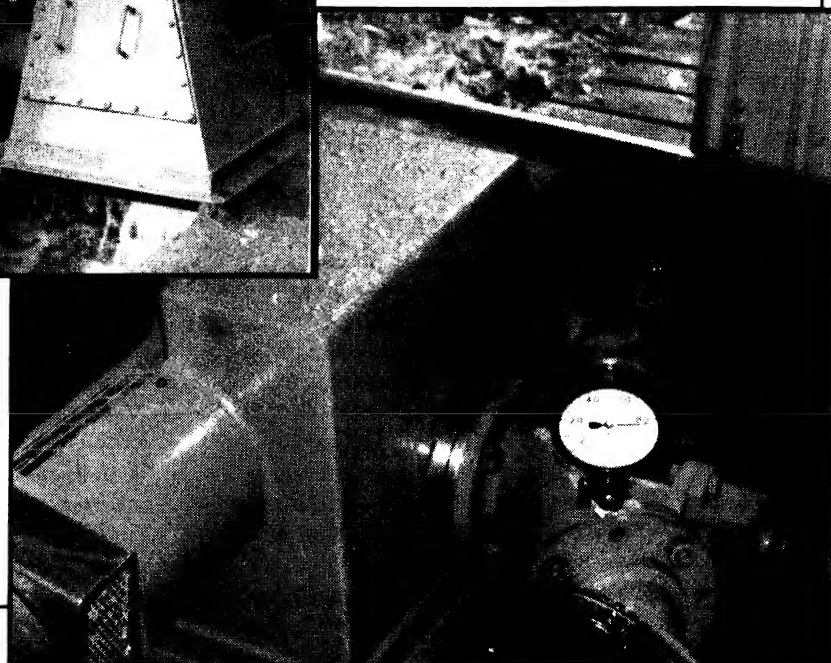
With all jobs done, we were ready for the electrician to wire in the final connections to the governor, alternator and house. We installed an ammeter and frequency meter, and the governor already incorporated a voltmeter, so we can at a glance monitor the quantity and quality of power being produced.



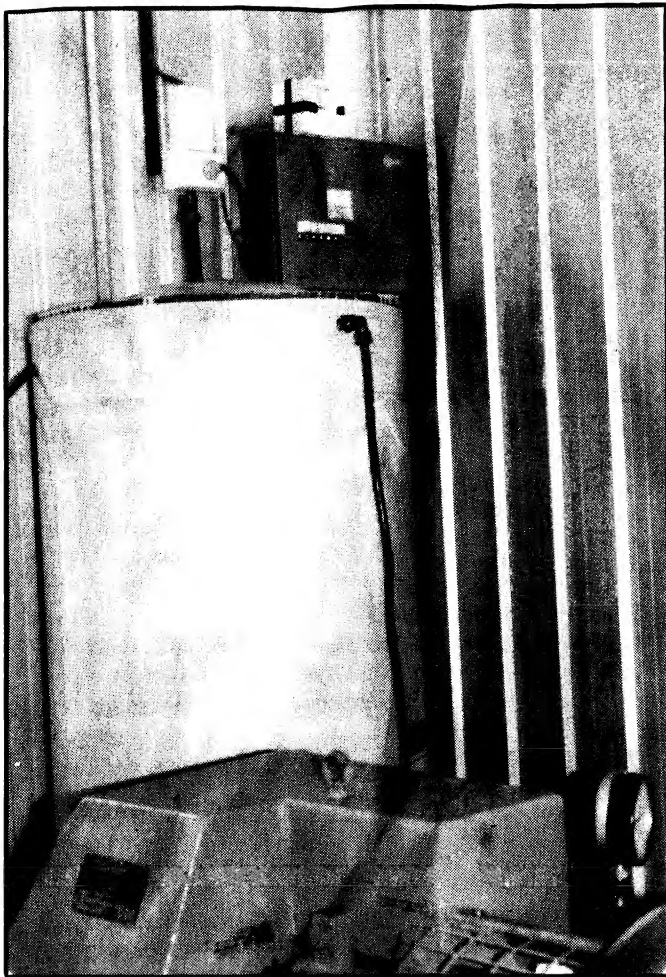
Our house and property, 60 km south of Cairns, showing the steep and heavily timbered slope behind the house.



Left: Duncan aged 13, adjusting the inlet spear valve. The large unit on the left is the old HWS containing the dummy load elements.



Right: the Pelton wheel housing, inlet spear valve and pressure gauge.



Turbine housing with dummy load hot water service. The governor is mounted on the wall with the frequency meter above it. The 240 v lights on the front panel indicate which dummy loads are operating.

At last, just before Easter 1982, the big day came, and after a couple of false starts we at last had power, real power, made for nothing from the water in the waterfall. After years of economising on diesel usage we could leave lights on all night, run anything we wanted whenever we wanted, get up at night and turn on a light just by flicking a switch, and never worry about a bill at the end of the month again.

Or so we thought. But apart from a series of minor but annoying problems revolving about the frequency and governing, that is pretty much the way things have turned out. I mow my very large lawn with an electric Flymo, thus saving more fuel, and we bought a microwave oven to save on gas and on cooking time for Pauline. The fridges run more efficiently, so that food loss has been largely eliminated and well, those of you who have always had electricity at the touch of a switch will just never understand how we feel, but those who do not have constant power will imagine our euphoria.

My water-flow calculations turned out to be overoptimistic, and we are able to deliver only about 6 litres/second to the turbine. This seems to be due to internal friction along the walls of our long pipeline, the numerous joins and the number of bends. Our maximum sustained power production is about 18 amps at 240 volts, 50 Hz, which is about 4.3 kW, still



Don installing a replacement intake after the first one was lost in a sudden flood.

ample to run a household, but not with everything on at the same time. I changed the element in the domestic hot-water system from 1800 watts to 840 watts, and it works just as well. We can't do the cooking at the same time as the laundry, but these are just matters of organisation of time.

The line from the powerhouse is connected to the house switchboard via an isolating switch which can be turned to either turbine power or diesel power, so we have retained the diesel as a standby unit in case the creek runs low in the dry season.

Total costs amounted to almost \$9000, the main items being:

Turbine, governor, dummy loads, adjustable spear valve etc:	\$5926
Freight ex Tasmania:	437
Electrical wiring, conduit switches, ammeter, frequency meter etc:	630
Aluminium pipes:	1200
Garden shed:	200
Plus sundries – cement, bolts, oxywelding, plumbing etc.	

We also have a waterworks licence from the Queensland Water Resources Commission, so that our usage of the water

is legal. This cost \$25.

This total expenditure may seem very large to *Grass Roots* readers, but in our overall situation I believe it to be reasonable and the best usage we could make of hard-earned money. The nearest Board power is now 3 km of rough country away (it was 6 km when we started planning) and would cost us \$10,000 to bring to our boundary, plus a large guaranteed payment each year. Diesel usage would cost a minimum of \$4 daily, even with the utmost economies made, and as the whole diesel unit is on its last legs it would soon have to have been replaced at a cost of well above \$4000. The turbine has an estimated life of fifty years, and maintenance is almost nil — a small amount of grease on the bearings once monthly and occasional visual checks on the rest of the outfit. We reckon that the turbine will repay its cost in less than four years. All of the work involved was done by myself and family, the only outside help being the electrician, welder and plumber as detailed. The main requirement for the job was a great deal of hard work, and I feel it was really too much for a one-man family, but there was no way we could afford to pay a man for the sort of donkey work involved. I learned a great deal about electricity and engineering as I went along, and had to solve an almost endless series of unforeseen problems.

If any reader is contemplating the installation of a similar unit, I would absolutely recommend it; however, considering the work and expense involved, it is not something to go into lightly, and if Board power is available close by it is certainly cheaper and easier as an alternative.

I would be happy to pass on any knowledge I have gained to anybody who is interested in installing their own hydro-electric system, and if they would like to write to me with a short description of their situation I will do all I can to help evaluate the feasibility of such a project.

Don can be contacted C/- Post Office, Babinda, Qld 4861.

**Next mudbrick building seminar/workshop
will be held at Bendigo on Sunday April
10th, 1983.**

As usual the day will be mainly orientated towards practical aspects starting from the selection of soils for the bricks and leading step by step right through to the completed house.

A large part of the day will be spent at an actual construction site and there will also be an opportunity to inspect our sod-roofed, dirt-floored mudbrick work studio. Early enrolment essential. Fee \$20 per person payable on enrolment.

**Russell Andrews & Associates Pty. Ltd.,
Box 366, BENDIGO 3550.
Tel: 054-395-667.**

**COLOURED WOOL WANTED
North Central Region of the Black & Coloured
Sheep Breeders Association**

THIS IS THE FINAL CALL

We have commenced bailing wool on January 29th, 30th, 31st. so HURRY if you are thinking of sending us any wool as we will not be able to keep the doors open much longer.

There's only a week or so left to get your wool in.

Depots:

Mr. D. Fraser 057-978-364

Miss S. Selman 057-978-233

Central Point:

Mr. H. McDonnell 03-408-1598

MOORA MOORA COOPERATIVE COMMUNITY FESTIVAL

The community is ten years old in 1983 and our festival this year celebrates that event. It will be held on Saturday February 26, and we invite you all to share with us on this day.

There will be the opportunity to look over the community and to see how it functions: the housing (much of it mudbrick, rammed earth and timber) with the attendant cluster gardens; alternative energy systems such as the wind generator and solar units; and the small school which began operating this year.

Displays and demonstrations are planned in alternative building techniques, various arts and crafts (spinning, weaving, pottery) and in creative health (massage, naturopathy, Touch for Health, Tai Chi). The children will love their special area of activities and entertainments, story telling and clowns being just a couple of the attractions. Music and theatre will be continuous throughout the day, and to round off the festivities there will be a bush dance in front of the community building in the evening.

The festival will begin at 10 a.m. and go through until midnight. Throughout the day delicious wholesome food will be available.

Admission is \$5.00 per adult, \$2.00 per child or \$12.00 per family. The bush dance will cost each adult \$4.00. This entrance fee will cover all activities, and the only extra you'll need is for food. Proceeds from the day will go towards the new school building and alternative energy systems.

Moora Moora has 245 hectares on the top of Mt Toolebewong. Begun in 1972, its aims centre around community, education and ecology. At present, fifteen houses are at varying stages of completion on six clusters. Membership stands at 44, with 21 members on the land. Eventually we hope to have 60 resident members with a similar number of children and 40 nonresidential members. At the festival you will have the opportunity to speak with the members about the community. As well as welcoming you all to the Festival, Moora Moora is open to visitors on the first Sunday of each month.

To reach Moora Moora, turn right at Don Read in Healesville and travel along it for about 8 km to Nyora Road. Moora Moora is approx 4 km along this dirt road. Just follow the signposts directing you to the Festival. We hope to see you all!



FOLLOW THE PATH OF THE ALBATROS

by Kathy Park, Lismore, NSW.



Sitting here now, thinking of the inevitable parting of ways, leaves me again trying to convince myself that buses are only a means of transport; but somehow, amidst it all, I feel the steady heartbeat of the Albatros — our home for the past five years.

We two wandering Kiwis, being of the non-flight variety, found the Albatros alone and sad in that lost and lonely land of Mt. Isa. For six months we nestled and nudged ourselves into the being of the Albatros. Our bird of good luck — through and through.

From Queensland to Victoria to Queensland — tropical winters spent in Cairns. Balmy nights parked under whispering palms on a twinkling moonlit bay. Hard to keep things in perspective at times, with each day unfolding in new directions. Wander free — no need to return anywhere, for home is where you park.

Shake off the sea breeze and salt air, take a deep breath beloved bus and let's go. Charters Towers, Hughendon, Mt Isa again — and on, deeper and deeper to the heart of Australia's infernal heat, mile after mile, sunset to sunrise; how can a country be so vast, so still and quiet as the deep of night? Tyres hiss, hot metal creaks — the Albatros rests.

Days and time and miles all pass. Ayers Rock unfolds timeless mysteries; our hearts are stirred but no lingering, for monsoonal changes press us further south through the desert vastness; deathly quiet salt lakes.

I'm sure he smelt the sea, caught the taint of salt in the air — wheels turning, motor purring. We wash ourselves free of the red dust at Victor Harbour. Adelaide holds us and our energy for a time, but time moves on as do we and wander our ways northwards. Follow the path of the sun.

But lo and behold, what does the future hold? And now we are three. I'll tell you now, there's not all that much room in a bus — even an Albatros bus — but a certain sharing grows from a physical closeness, and new babies tend to make things even more complex. But the answer to it all is simple: just be happy.

So we spend all our time together. The Albatros family — I've heard us so named. Quite the occupation this freedom. Where to go, what to see . . . but I'm quite sure that somehow the Albatros has it all planned, with so very very much more in store.

What began as merely a more comfortable means of transport has grown into a very unique lifestyle shared by fellow 'bus dwellers', whom we meet again and again in the most peculiar spaces.

I could continue on for page after page, as does the Albatros Log Book, but that would be of time and places past; today is our reality and tomorrow is the unknown essence. Our lives are that free.

But now our hearts have the urge to return to NZ, to the quiet and peace it offers us, and to a magic old Chevvy truck my father has given us, like the proverbial carrot to the donkey; but, alas for him, another home we shall create upon its back and again we'll wander off into the wilderness . . .

And so we are coming to the end of the time under the wings of the mighty Albatros; but somewhere out there I know that there is someone with a wandering heart who needs a wandering home fully equipped for catering to bodily needs and fully capable of taking one where the heart desires to go.

If you feel you can come up to the expectations of the Albatros (as remaining still is not one of his strengths) then perhaps you could join forces with our dear friend.

Come take the wheel and let Australia unfold — your back yard is where you choose to park.

Any sincere enquiries contact Larry and Kathy Park, C/- Lismore Post Office, Lismore NSW (one of the nicer post offices we have met).

SOFTLY, SOFTLY

A gentle approach to avoiding sugar

by Maureen Leslie, Highlands, Vic.

Like most mothers, I suppose, for years I felt vaguely guilty about the amount of sugar I was giving my family, and allowing them to consume. Every time I read an article or heard a lecture about our dangerously high sugar intake, I would rush home inspired, and announce to my husband and five children, 'No dessert tonight. Fresh fruit instead! Much better for you!' Or I would carefully adapt a cake recipe, replacing all the sugar with honey. Then I would smilingly present it to the ravenous hordes, only to be greeted by howls of 'Yuk! What's this? Isn't there any decent cake? Let's have biscuits instead.' So I gave up in despair and disgust.

However, the day came when the whole family was forced into really taking seriously this 'sugar business that Mum raved about'. One of our children had been diagnosed as epileptic, and, after severe reading problems had shown up at school, as dyslexic. After years of frustration and little help, we finally found a remedial centre which achieved results with him. The staff at the Centre had noticed that a surprisingly large number of their underachieving pupils had hypoglycaemia (low blood sugar) or various types of allergies.

Hypoglycaemia is a complex condition, which is impossible to explain here. Basically, however, it means that the level of glucose in a person's bloodstream falls too low. This can give rise to an enormous range of symptoms: top of the list are exhaustion, depression, insomnia and anxiety, but also included are mental confusion and behaviour problems, and many, many others. Now, it seems strange to suggest that the way to combat low blood sugar is to avoid eating sugar, but it appears that hypoglycaemia actually can be induced by an excessive intake of sugar. This is the belief of a growing number of doctors and healers; for a detailed and thoroughly understandable explanation of this view, I suggest you read Dr Paavo Airola's book, *Hypoglycemia — A Better Approach*.

Well, our boy's series of tests did show up a condition apparently similar to hypoglycaemia and allergies to two major preservatives used widely in food, as well as allergies to alcohol, oranges and brewer's yeast, if you please! So we all had to get together and work out how to rearrange our eating habits, so that our son could have a diet which would help his condition, and which would not tempt him to sneak the others' food if it seemed more appetising than his. We decided that it would be best if we all ate approximately the same thing, but this is easier said than done. We could have hardly any bought processed food. No more frankfurts — moan! No more soft drink — groan! No more lollies — wail! No more ice creams — scream! And worse, no more pre-dinner sherry for Rob and me, nor glasses of beer, which we loved to sip on the verandah after tea on a hot summer night — woe! And so the horrible reality struck home.

I can just see all you health-conscious people out there, having trained your children into good dietary habits from birth, raising an eyebrow and giving a knowing smile as if to say, 'There's nothing to it! My children prefer salads to sweets. They don't really like chocolate,' and so on. However, I must shamefacedly admit that people in our family seem to

be born with a sweet tooth. When I was a child, dinner without a sweet to follow was unheard of, as were morning or afternoon tea without biscuits or cake, not to mention my dear father's habit of sprinkling almost everything with sugar — strawberries and cream, puddings, custards and pancakes.

Well, with this background to contend with, we decided that we would just have to do the best we could, perhaps having to compromise a little, but at least we would have a go.

Firstly, I would try to prepare as much of our food as I could. I thought I had already been doing so, but, when we came to analyse it, it was surprising how much I was still buying. Bread and ice cream were the two major bought foods to be replaced by the home-made variety. Main courses presented few problems, but what were we to do about desserts, drinks and between-meal snacks? We decided that, instead of doing without, we would try to substitute new recipes for our old sugary ones.

Then I thought I would make it easy for myself by using recipes for diabetics. However, these proved to be of limited value because most of the recipes simply substitute saccharin for sugar. I was not keen to use saccharin because, with our boy's sensitivity to artificial preservatives, it seemed possible that he would react badly to saccharin too.

I read the book by Paavo Airola that I mentioned earlier (*Hypoglycemia — a Better Approach*). I found it most interesting, and I am sure the recommended diet would be helpful to a strongly self-motivated adult who was cooking for her/himself alone. The basic foods of the Airola diet are seeds, grains and nuts, with vegetables and fruit next, then milk and eggs, and lastly a very little meat, but preferably none. Try to change a pack of teenagers over to that! I simply hadn't the courage to attempt it, although I did take a lot of Dr Airola's ideas for individual meal plans and recipes.

What about using honey instead of sugar? The doctor had said that it would be all right to try him on small amounts of honey, so I bought honey cookbooks. But most of the cake recipes had both honey and sugar in them. When I tried cutting out the sugar and using only the honey, I found out why. The cakes tasted more like bread than cake, and biscuits were more like dog biscuits.

Drinks, then! But even home-made cordials have tons of sugar. And so does home-bottled fruit, if you follow the instructions. By this time, I was almost tearing my hair out with frustration.

However, after much trial and error, and careful searching of cookbooks, I came up with a fairly workable set of rules and recipes. We follow these (with occasional lapses) and we all think that the improved diet has done us good.

Here are some general rules which I have found useful in helping the kids avoid the craving for sugar.

Breakfast

Make your own muesli. I throw in everything I can (except sugar), and toast it (see recipe). Topped with home-made yoghurt and fruit, it fills children up well.

Make breakfast a meal, not a snack, with porridge or muesli, followed by eggs, or cheese on toast, or cooked tomatoes and so on.

Drink milk or freshly squeezed fruit juice. If you buy juice, make sure you choose an unsweetened one without preservatives. Read the labels carefully.

If the children like bread and jam, try making diabetic jam, as described in the Fowlers' book (see book list). It does not contain saccharin. Sometimes we simply crush sweet berries (like raspberries, strawberries or blackberries) and spread the pulp. Or you can boil the berries (with just a smidgin of honey) to make them more spreadable, and keep them in the fridge. They can be thickened with a little arrowroot.

School lunches

Home-made bread tends to become a bit crumbly when carried. Try using gluten flour in the mix. Or cut the lunches when the bread is fresh and at a good consistency, put it in the freezer, and take it out just as the children are leaving. It will survive the trip to school better in a frozen state, and will not be so likely to end up in the rubbish bin as a bundle of crumbs. However, shop-bought wholemeal bread often has to be used. Make sure the fillings are savoury (watch out for peanut butter too — some popular brands contain considerable quantities of sugar).

For a sweet touch at the end, pop in a couple of wholemeal or muesli bikkies, or a piece of cake (see recipes).

Plenty of fruit. Don't just stick with the usual apples, oranges and bananas. Sometimes give a slice of rockmelon, a bunch of grapes, tamarillos, or a passionfruit with a spoon for scooping out the pulp.

Soup, or milk, or juice in a thermos.

Every so often, let the kids have a binge, and buy their lunches at the school canteen. No questions asked! I find that this makes them feel a *little* less 'peculiar' amongst those who buy their lunches nearly every day.

Snacks

Juice paddle pops. Boil up old paddle-pop or ice-cream sticks, stand them in small yoghurt or cream containers, fill with juice and freeze. Or you can use the Tupperware holders.

For school, pack a midmorning snack of fruit or cheese and crackers, or hard-boiled eggs, hoping it will fill the children up enough not to want a can of Coke and a doughnut.

Have afternoon tea ready on the table when they arrive home. If you are out, or go to work, try to prepare it in the morning and leave it covered on the table. A bowl of dried fruit and nuts is always popular, with a milkshake or egg flip, and maybe a piece of cake, or biscuits and cheese. Sweeten

the milkshake with honey, and use home-made ice cream in it.

Other drinks can be Vegemite, Bonox or fruit juice (as for breakfast), or herb teas.

Try to give the family large amounts of the more savoury things first, so that there is not much room left by the time they progress to the sweets.

Main Meals

Soup at the beginning helps.

Give good serves of the first course: 'More vegetables or salad for anyone?' Don't assume that everyone will want dessert. Ask if anyone would like it. Worth a try, isn't it?

Meat and vegetable dishes with sugar added, by the time they are spread around the whole family, do not contain much sugar per portion, so I don't worry too much about cutting the sugar out of these. After all, you cannot really have 'sweet and sour' without the 'sweet', can you? Try honey instead of sugar for glazes. It tastes just as good.

Desserts

Berries are marvellous. We pick kilos of raspberries at Macdonald's raspberry farm at Molesworth (see GR No. 18) during the season, and freeze what we do not use immediately. Blackberries and strawberries are treated in the same way. We don't add any sugar to the berries: just tip them over ice cream, or ladle cream on top — yum! If they are slightly bitter, put them in a little saucepan with a little honey, and heat. The kids love the hot sauce on cold ice cream. Berries can also be cooked in pies, using very little sweetening.

When making pastry for sweet pies, only the tiniest scrap of sugar or honey is needed if the filling is to be sweet. I often use plain shortcrust pastry without sugar, and the family doesn't even notice.

When making pouring custards for use over sweet fruit or puddings, you do not need sugar in the custard. The blandness of the custard offsets the richness of the other part of the dessert. Try it with prunes or dates. You won't miss the sugar.

Baked custards likewise. A little sugar sprinkled on top with nutmeg or cinnamon is tasty, but you don't need sugar in the original egg-flip mix.

When you make a fruit crumble, try stewing the fruit without sugar, and putting the sugar (demerara or brown) in the topping. It tastes sweet, but you eat only half as much sugar as you would if you followed the recipe to the letter.

Crushed crumb crusts for cheesecakes are very nice made with crushed stale home-made breadcrumbs instead of crushed sweet biscuits. (Use the lot that was too crumbly for the kids' lunches.) Crushed Weetbix or Weeties are good too. Mix with melted butter, and press into the base of the pie plate, before filling with the top mixture.

Cakes and Biscuits

As a general rule, I use half to a third less sugar than the recipe suggests. It doesn't always work, but mostly I find that nobody even notices the difference. Recipes using dried fruit need hardly any sugar, as the fruit is already very sweet.

Don't make the usual icing-sugar icings. Top with a fine sprinkle of icing sugar, as Judith Magor suggests (GR No. 27), or use one of the toppings recipes, using yoghurt, cream cheese, egg white, or seeds and spices.

RECIPES

Here are a few recipes which we find tasty, and which have a minimum of sugar.

TOASTED MUESLI

First mix the grains and nuts in a large heatproof bowl. Use anything you have: any mixture of the following, or any others you can think of.

Rolled oats	Lecithin
Semolina	Almonds
Sunflower seeds	Coconut
Bran	Polenta
Walnuts	Sesame seeds
Wheat grits	Wheatgerm
Hazelnuts	Peanuts
Poppy seeds	

Pour a few tablespoons of vegetable oil over the lot and mix well. Place in a low oven, let the top get lightly brown and crisp, then stir well. Keep this up till there is a crunchy texture to the whole mixture, but be careful to check it regularly so that it does not burn. Remove from the oven and add sultanas, currants, raisins, dried apricots, apples, figs, etc.

Moisten with milk or fruit juice when serving; it is nice with some yoghurt spooned over it too. No sweetening is needed, but a drizzle of honey is acceptable if you must. Try a small helping first. You will find it quite satisfying, as the raw grains tend to swell in your stomach.

CAKES

Sunflower-topped Coffee Cake

2 cups wholewheat flour	1 tsp baking powder
2 tbsp milk powder (or 3/4 tbsp instant)	1 tsp salt
1/2 tsp baking soda	2 tsp mixed spice
2 eggs, beaten	1 cup buttermilk or yoghurt
1/2 cup honey	3 tbsp melted oil or butter

Topping

1/2 cup sunflower seeds, coarsely chopped	
1 tbsp butter	2 tbsp honey

Stir all dry ingredients together, using only half the spices. Set aside remaining spices for topping. In a separate bowl combine eggs, buttermilk, honey and melted butter. Stir wet ingredients into the dry, with as few strokes as possible, then turn mixture into an oiled baking pan.

Prepare the topping as follows: melt 1 tbsp butter in small frying pan; add chopped sunflower seeds and heat until toasty brown and fragrant with butter. Remove from heat; stir in honey and remaining spices.

Spread topping carefully over batter in the pan, and bake at 180°C (350°F) for about 25 mins, until cake tests done.

Daisy Cake

1/2 cup shortening	1/2 cup raw sugar
2 eggs	1 cup wholegrain flour
2 tsp baking powder	3 tbsp milk
1/2 tsp vanilla	1 small orange
1/2 cup coconut	

Cream shortening and sugar, add egg yolk, then flour, milk and vanilla. Add grated rind and juice of orange. Beat whites stiffly with one teaspoon raw sugar, add coconut. Put cake mixture into greased sponge tin, spread coconut mixture on top. Bake in moderate oven for half an hour.

Banana Date Health Loaf

125 g (4 oz) shortening	1/2 cup brown sugar
1 large egg	2 tsp lemon juice
1 cup mashed banana	1 cup rolled oats
1 cup wholemeal SR flour	1/2 tsp salt
1 tsp baking powder	3/4 cup chopped dates
1/2 cup buttermilk or yoghurt	

Cream shortening and sugar. Beat in egg and lemon juice. Combine bananas and buttermilk, stirring lightly. Fold oats, flour, baking powder and salt into the creamed mixture, alternately with the bananas and chopped dates. Turn into a large, lined and greased loaf tin and bake in a moderate oven for 60-65 minutes. Cool in tin for ten minutes before turning out.



BISCUITS AND COOKIES

Wheat Grits Biscuits

250 g (8 oz) shortening	125 g (4 oz) raw sugar
2 eggs, pinch salt	250 g (8 oz) fine wheat grits
250 g (8 oz) wholegrain flour	8 tsp baking powder

Cream shortening and sugar, add eggs and beat. Add flour, baking powder and grits. Roll into balls and place on greased tray. Press down with a fork. Bake till golden brown in moderate oven.

Oatmeal Biscuits

125 g (4 oz) oatmeal	125 g (4 oz) plain w/m flour
75 g (2 1/2 oz) melted shortening	milk to mix

Sift flour, mix melted shortening into flour and oatmeal, then mix to a firm dough with a little milk. Roll out very thinly on a floured board, and divide into 32 pieces. Bake on a greased slide in a moderate oven until browned. May be served buttered.

Wholemeal Carob Brownies

1/2 cup honey	1/2 cup oil
1/2 cup carob powder	2 eggs, beaten
2 cups wholewheat flour	1/4 tsp salt
1/2 cup soya beans, roasted, ground	1 tsp vanilla

Blend honey, oil and carob powder. Gradually add eggs. Stir in flour and salt. Add soya beans and vanilla. Turn into oiled 20 x 20 cm (8 x 8 in) pan. Bake at about 180°C (350°F) for about 30 mins. Cool and cut into squares. Makes 16 squares.

LOLLIES

Peanut-butter Candy

1 cup peanut butter
2 cups dry powdered milk
1/2 cup honey

Mix the ingredients together in a bowl, adding the honey a little at a time until mixture sticks together. Shape into little balls. Roll in fine flour or sesame seeds, put on a plate, and

refrigerate until firm. These candies are rich in calcium and protein.

Sesame Fruit Balls

250 g (8 oz) pitted dates ½ cup seedless raisins
250 g (8 oz) dried apricots ¼ cup sesame seeds

Grind fruit. Mix. Shape into small balls. Roll in sesame seeds, desiccated coconut, or any desired covering.

ICINGS

Tinted Cream-Cheese Frosting

Blend cream cheese with small amount of unsweetened grape juice. Frost plain cakes or patty cakes.

Carob Frosting

½ cup carob powder ¼ cup honey
¾ cup milk powder 4 tbsp cream
2 tbsp oil 1 tsp pure vanilla extract

Mix all the ingredients in a blender.

Honey Frosting

1 egg white ½ cup warm honey (try less)
¼ tsp salt ½ tsp almond extract

Beat egg white with rotary beater. Add salt. Continue to beat. Pour honey in thin stream over egg-white mixture, then add flavouring, continuing to beat meanwhile until thick and fluffy.

DESSERTS

Fruit Torten

Basic dough:

1 tbsp honey 1 cup wholewheat flour
¼ cup oil Grated rind of 1 lemon
1 raw egg yolk Milk (if necessary)

Blend honey, oil and egg yolk. Stir in flour and rind. Add a small amount of milk, if necessary, to make a stiff dough. Pat dough to a depth of 5 mm (¼ in) in unoled pan. Chill. Spread with one of the fruit fillings listed.

Basic filling:

500 g (1 lb) dried apricots, prunes, nectarines, apples or peaches, or a combination of these. Soak overnight, drain, pit, if necessary, and cut into pieces, reserving juice for compote or fruit drinks. Or use proportionate amount of fresh berries or other fruit. After fruit has been spread over chilled dough, top with custard.

Basic custard:

2 eggs 1 tsp vanilla extract
3 tbsp honey 2 tbsp rich milk

Blend all ingredients and pour over fruit. Bake torten at 190°C (375°F) for 20 minutes, then at 150°C (300°F) for 20 to 30 minutes, or until custard is set. Serve hot or cold, adding a dab of yoghurt or sour cream to each portion, if desired. Serves 8.

Fresh Plum Dessert Cake

This is a good way of using up the wild plums which the children bring home in bucketsful in early summer.

750 g (1½ lb) fresh plums 90 g (3 oz) shortening
60 g (2 oz) raw sugar 1 tbsp grated lemon rind
2 eggs 180 g (6 oz) wholegrain flour
3 tsp baking powder 2 tbsp milk
1 tbsp raw sugar, mixed with 1 tsp cinnamon

Halve and stone the plums if you wish, and place in the bottom of a greased casserole dish. Cream together butter and sugar with the lemon rind until light and fluffy. Add eggs and beat well. Add flour and baking powder to the mixture alternately with the milk. Spoon batter over the plums and sprinkle the top with cinnamon and sugar. Bake in a moderate oven 180°C (350°F) for about one hour or until the cake is cooked. Makes about 6 servings. Serve with cream.

Conclusion

In changing our family's eating habits, we have found it better in the long run to hasten slowly. Replace sugary foods a little at a time. Don't thrust too many new and different recipes on the family at once. Start with an occasional new taste, assess reactions, and proceed step by step. For a start, continue providing most of the sweet food that your family likes, but gradually decrease the amount of sugar. After a while you will find that cakes and biscuits cooked with the recommended amounts of sugar now taste too sweet. I think that after experimenting with this method, you will find that your children will be much happier with more savoury foods, and you and they will have the satisfaction of knowing that you are not building up unnecessary illness for the future.

However, in conclusion, I would like to sound a warning about the dangers of becoming too fanatical about always providing your family with 'the best' food. Thea Stanley Hughes, founder of the League of Health in Australia, and a writer with great perception and common sense, has this to say:

My observation of people has taught me that children who have all the overrefined food and a calm and happy mother are better off than other children who have the best food and a mother who is overanxious for them to excel in health or anything else

Further reading:

Books by Thea Stanley Hughes, available from Movement Publications, 10 Argyle Place, Sydney 2000.

The Natural Foods Cookbook, by Beatrice Trum Hunter. New York, Simon & Schuster.

Recipes for a Small Planet, by Ellen Buchman Ewald. New York, Ballantine Books.

Nitty-Gritty Foodbook, by Sheryl Patterson Herdt. New York, Praeger Publishers.

100% Wholegrain Recipes, by John and Yvonne Magrath. Lowan Whole Foods, 58 Nelson Street, Nhill 3418. Available from this address, and also from some health-food stores.

The Wheys of Warrandyte: Warrandyte Arts Association Cookbook. Available from The Warrandyte Arts Association, C/- Post Office, Warrandyte, Victoria.

Diabetes Foundation of Victoria Recipe Book. Each state has its own Diabetes Foundation, listed in the phone book.

Fowler's Method of Bottling Fruits and Vegetables. Available from Fowlers Vacola, Station Street, Nunawading 3131.

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HANDY HINT

To kill ants in the yard or garden save coffee grounds for a week. For each kilogram of grounds, use 2 litres of water. Blend grounds into the water and pour over ant-hills and ant-runs.

Tree Freaks

by Libby Davies, Wayville, SA.

'Barren bit o' land,' commented the real estate agent, squatting on a rock and attempting to light his pipe for the fifth time. Mindful of the fire danger, he was careful to snuff the match. There was much dry grass about, and prickly grey stalks from last year's Salvation Jane.

'Couldn't put a plough over it,' he continued. 'Too bloody rocky. Still, some people see beauty in windy hilltops and stony cliffs.'

Evidently I was one such person. From where I stood on the flat piece of land which dropped suddenly and precipitously down to the valley several hundred feet below, I could see a great expanse of sky, low rolling hills, and the dry creek-bed, picked out by trees, snaking its way to the Bremer.

It was sheep country. 'Bugger all else you can do with it,' said the agent pessimistically, sucking on his pipe and waiting patiently for Mike to reappear.

He had gone exploring on foot, as the track on which we arrived stopped abruptly at the dry-stone wall by the boundary fence. Beyond it, two skinny ewes regarded us myopically, while more of their kind grazed peacefully in distant paddocks — grey tufts on an even greyer background. Nearby a stumpy-tail lizard dozed on lichen-covered rocks, absorbing the midday heat. He threatened us with wide, toothless jaws — a token gesture — and thereafter ignored our presence. Insects hummed in the stubble, and the air smelt warm and fresh and earthy.

Mike returned from his walk elated, and assured me that the land upstream held promise — there were waterholes in the creek-bed shaded by spreading eucalypts, and patches of bullrushes in the valley indicated the presence of underground springs.

We desperately wanted to buy the property, but had no money for a deposit. Our first few visits to lending institutions were discouraging, and while we were not exactly laughed off

the premises, neither were we given any hope. One bank manager was openly hostile. 'I would like a property in the country too!' he said indignantly. 'You teachers come in here expecting all sorts of handouts!'

We are not teachers. I suppose he assumed that we were because our visit coincided with the beginning of the school holidays. Eventually we approached a bank with whom I had kept a small deposit for a number of years. The manager listened to us sympathetically and agreed to inspect our home in the city, with the possibility of using that as equity. He also spent a morning looking at the property, and must have recognised its potential, for the following day, my thirtieth birthday, he agreed to make out in our favour a fully drawn advance for the total amount, plus an additional sum to cover any fees incurred during the purchase.

The most serious obstacle thus removed, we were free to sign the contract and plan improvements. And, not least, to begin to enjoy possession of our very own eighty acres.

We encountered mixed reactions from friends and relatives who subsequently visited the place; it seems that people either love or loathe it, the latter reaction being typical of those who prefer green and gentle landscapes. Some were quite guarded and apprehensive, believing we had purchased a distinct liability. But my father, when told, hopped jubilantly from foot to foot and thumped the map with glee.

'Why, that's the very land I used to go rabbiting on as a lad,' he said. 'I've always wanted to see it again.'

The rabbits, we later discovered, were one of the main reasons for the lack of green vegetation and regrowth. The ground was riddled with burrows, and every soft patch of sandy soil had little hollows where they made tentative scratchings. When the sheep were removed, the rabbits thrived because of the lack of competition and multiplied enthusiastically. They had voracious appetites. During our



first year of ownership we planted eight hundred pine trees on the river flat, and the rabbits ate all but one. The lonely survivor still stands — a monument to Betty's ingenuity in placing around the tiny trunk a wire tree-guard, fashioned from pieces of broken fencing.

We learnt from this experience, and now every seedling is accompanied by a guard and wooden stake. It makes planting an expensive and time-consuming business, but the many rows of healthy trees are a testament to our care and effort, and an encouragement to continue. My father, in his retirement, has gained a new occupation, and his suburban back yard has partially assumed the characteristics of a nursery, where young plants are lovingly germinated and tended. 'Dad's hill' is probably the most barren, windswept and eroded section of the entire property, but he has a remarkable success rate with his plantings, and the little trees, easily located by their white painted stakes, are flourishing in the new environment and bursting through their wire frames.

Because we are situated in the rain shadow of the Mount Lofty ranges, water has always been a problem. It is impossible to irrigate, so only the most hardy and best adapted trees thrive. We have learnt to cease planting by September — anything planted out after that month will not have a chance to spread roots before the dry sets in, and we may experience five months without rain. Stress has killed a large number of plants, but we now select only those species which have proved themselves in such a climate. These include casuarinas, acacias, carob, sugar gum, pistachios, olives, lemon-scented gum, and a few other native and exotic varieties. Initially we were discouraged by our failure rate, which was about four in five, but in speaking to an officer from the Woods and Forests Department we were given cause for self-congratulation. He said that experimental plantings under similar circumstances by the Department had often resulted in 90% losses or greater.

Our reforestation initiatives were viewed with some suspicion by the landowner on our southern boundary, who is a conventional sheep farmer, having several hundred acres. For the first few years there was little contact between us other than the occasional telephone call. He seemed to regard us as bearded/naked tree freaks or ignorant hobby farmers: surely anyone foolhardy enough to remove a reliable source of income (sheep) and substitute trees, which were so susceptible to the vagaries of nature, had to be misguided. But he was somewhat mollified when he discovered that Mike could repair fences. And that we were conscientious about cutting breaks to reduce the fire hazard. And that we notified him of any sheep which had strayed onto our land. Once he mentioned that he kept binoculars in his ute for this very purpose; not only could he identify his beasts for miles around with this visual aid, he could also keep tabs on his neighbours, including us.

'I seen you,' he confided. 'I seen you sporting in the waterholes. You don't wear any clothes, do yer!'

The famous waterholes are a focal point and meeting place for many of our friends on hot weekends, and it has become traditional to have 'open house' during the Australia Day weekend in January, when temperatures often hover

around the century. There are four large pools. These are shaded by river redgums and fringed with bullrushes and bottle-brush; the fourth (our favourite) has its own little waterfall and is set against a backdrop of rocky cliff-face, in whose crevices and caves live not only rabbits, but snakes, lizards and a fox or two. The level drops substantially in summer through evaporation, but there is usually sufficient water left in the largest hole for a decent dip.

Further downstream are caves of considerably larger dimension, and these were used extensively by the several Aboriginal tribes that inhabited the area before our ancestors displaced them. Copper mining during the the last century was responsible for the desolation of the surrounding country, as all the available timber was felled for pit props and boiler fuel. Rabbits prevented regeneration of scrub, erosion occurred, and sheep ravaged whatever remained.

Our first priority is rehabilitation. By removing stock, we have allowed the grass to grow and die back naturally for six years, thus improving the topsoil through the build-up of rotting vegetable matter. The trees we have planted will send roots deep into the subsoil and, by leaf drop, renew minerals on the surface which have been depleted by wind and runoff. Birds have moved back into the area. Previously the domain solely of magpies, hawks and crows, there are now a number of interesting varieties, including a family of mud swallows which annually nests in our shed.

We are not self-sufficient, although it is our intention to become so with time. At least eighty of the almond seedlings we planted last winter have survived and await budding. The olives too are slowly increasing in size, and will need to be grafted shortly with cuttings from the big-leafed, fat varieties. When the trees begin to flower we will move in several hives of bees to aid cross-pollination, and from spring to early summer they can also work the plentiful crop of Salvation Jane. This year we intend to grow peas for market, and next summer will experiment with a crop of tomatoes in the hollow below the underground spring, thus reducing the need for hand-watering.

Throughout all our trials the emphasis has been on permaculture, and we hope to diversify even further in the future by introducing some stock when the trees are sufficiently large to survive interference. Our ultimate aim is to live on the land; and in preparation for our 'retirement' (and present comfort!) we have built a small cottage from local stone consisting of two main rooms and a verandah.

Financial constraints are not the only reason we choose to remain in the city, although with a growing family there is security in retaining for the present a regular income. More significantly, two of our sons attend an agricultural high school not far from home, and commuting from the hills each day would take a large slice out of their recreation time. In addition, we enjoy being part of both worlds. Unlike some, we see no antagonism between town and country, but appreciate their reciprocal benefits.

HANDY HINT

To remove earth stains from your hands, sprinkle moist coffee grounds upon them and wash your hands with these grounds to remove the stains.

RESPONSIBLE HOME BIRTH



The concerns of *Grass Roots* magazine — to follow a more natural, self-sufficient and healthy lifestyle — are not just matters of food, clothing, farming, housing, transport and energy. These concerns are also relevant to the passage of life and death. In this article we talk about birth, about how we can actively take control of the manner in which we give birth through responsible home birth. We will also briefly share our different experiences of birthing to show how joyous and caring home birth can be.

Firstly, what do we mean by responsible home birth? A common reaction to the idea of home birth is the raising of hands in horror and a plea for the baby: 'What if something goes wrong?' The pivotal argument for home birth is that in the majority of cases birth is a normal event. Numerous birth experiences, studies on birth and birthing in traditional societies tell us that birthing is normal and natural, not a disease or sickness; it requires not medical technology and intervention, but caring support, encouragement and knowledgeable helpers. Some researchers argue that around 95% of all births are without complications. Clearly, for the 5% of 'problem' births, and for those who feel at ease and safer in hospital, hospitals are necessary as places of birth. For the potentially uncomplicated birth, birth at home can be a safe alternative.

At the last count, 3885 responsible home births took

place in Australia and New Zealand in the six years prior to 1979. Eleven babies died. This shows a perinatal mortality rate of 2.9 per thousand live births compared with the overall Australian figure of 11.4 per thousand live births. (1979 Homebirth Australia figures.)

Home birth allows you to choose where, how and with whom you give birth. It allows the father or partner to participate fully in the labour. It also avoids the need to isolate other children in the family at such a special time. Indeed, birth at home presents birthing as a natural and integral part of living.

But birth at home is no light matter. It requires much learning and preparation. For a responsible home birth the couple must find either a midwife and/or doctor to assist during the labour. The pregnant woman must be healthy, physically fit, have good nutritional habits, be well informed and have a positive attitude to birth. A telephone and transport are essential. The midwife may require that the woman birthing at home be within one hour of a hospital. Taking full responsibility in a home birth implies agreement to shift to hospital should the midwife or doctor think it necessary.

Home birth allows the woman to give birth actively rather than passively having the baby delivered from her. This active role requires that the woman, her partner and her helpers learn much about the physical, psychological and

spiritual facets of birth. This can be done through antenatal classes, by reading and by talking with others who have given birth. Relaxation and breathing techniques should be learnt and practised well. During antenatal visits the doctor and midwife must screen the woman for birth at home to ensure she is in good health and that the pregnancy is following a natural course.

In these visits the medical history of the woman and her family, the position of the baby, and the mother's pelvic size, blood pressure, urine and weight gain are checked. Blood samples are tested for type, Rh factor, and haemoglobin. The midwife and doctor check for any warning signs such as fever, dizziness, swelling or bleeding. If there is any complication or potential problem in the pregnancy a hospital birth is recommended. With thorough antenatal care many potential complications can be recognised at an early stage and can be avoided before labour commences.

Attending midwives and/or doctors carry some emergency equipment such as oxygen cylinder, suction apparatus, intubation equipment and ergometrine (in the event of haemorrhage). Possible complications such as prolapsed cord, postpartum haemorrhage, depressed baby, toxæmia and antepartum haemorrhage — their likelihood, how they can be possibly avoided in screened home births and the ability of the midwife or doctor to deal with them at home — are discussed fully in *Responsible Homebirth* and *Special Delivery*; see the book list at end of this article.

To assist you and your partner with the learning and preparation, a home-birth association exists in major cities throughout Australia. These associations provide midwife and doctor contacts, equipment for the birth, a library and films, support and importantly, contact with other pregnant women and their partners. (Note: to date health societies do not refund for midwifery services at a home birth. Fees for attending doctors and for home nursing are refundable.)

To make our point a little more personal and real, we would like to share briefly our experiences of a home birth and a home/hospital birth.

Wendy

Labour started around lunchtime. I rang my midwife and helpers. Simon and I started to prepare the birth room and the food for the helpers. My midwife arrived mid-afternoon and examined me; she started to organise the equipment for the birth and then kept a check on contractions, blood pressure and fetal heart beat. She helped us to breathe and to relax with each contraction. Both midwife and helpers gave me tremendous love and encouragement which supported me through the nine hours' labour. The doctor was notified and he arrived in time to receive our baby. Kaya was sucking well about half an hour after she was born. She slept between us in our bed that night. After the birth my midwife visited regularly, keeping a check on both the baby and myself. She helped to establish breast feeding in these visits. It was a wonderful and loving experience that we were able to share with our friends and family in the peaceful and familiar surroundings of our home.

Kathy

After some deliberating and much reading I planned to have my first child at home. To me, birth at home kept the pregnancy and the labour as my responsibility and task. It kept all the emotions and practicalities surrounding birth within the realm of the normal and out of the realm of sickness. It also meant Robert could share fully in the birth. My labour proved to be a long process. I laboured at home for 19 hours, assisted and encouraged by Robert, three women friends and my midwife, whom I had come to know and trust through the antenatal and home visits. Because the labour had not progressed sufficiently, my midwife suggested a transfer to hospital — a 15-minute car ride away. We were well received by the hospital staff and I was put on an oxytocin drip to speed up my 'inefficient' contractions. I gave birth to a beautiful, healthy 8 lb 13 oz son 14 hours after arriving in hospital. Although the labour was long and hard work I felt I had a 'home birth' in hospital as I was able to take my learning and the support and love of my partner, friends and midwife with me. My state of mind — regarding birth as a normal process — and the trust I held in my body to give birth did not leave me, although I needed the technology and expertise within the hospital to bring my labour to completion.

We would encourage pregnant women and their partners who are interested in alternative living to consider home birth as a realistic alternative to the all too often standardised, impersonal and technological procedure of hospital birth.

If any *Grass Roots* readers wish to contact us we can be reached at 18 Wambool Street, Narrabundah, ACT 2604. A list of home birth contact groups in other cities is included in Information Available.

* * * * *

Some books we found useful

Birth at Home by Sheila Kitzinger (Oxford University Press, 1979)

Place of Birth by Sheila Kitzinger and John Davis (Oxford University Press, 1978)

The Experience of Childbirth by Sheila Kitzinger (Penguin, 1978)

Responsible Homebirth by Henny Ligtermoet and Margaret Ireland (Midwifery Contact Centre, Shoalwater, WA, 1978)

Spiritual Midwifery by Ina May Gaskin (Collins, 1978)

Special Delivery by Rahima Baldwin. (Les Femmes, 1979).

Photo from *Birth Book*, published by Genesis Press, California.

This is one of our favourite home birth books at *Grass Roots* and was reviewed back in issue No. 25, p. 76.

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THE HARD-SHELLED GOURD

by Gypsy J. Jessop, Goongerah, Vic.

In the last issue (No. 34) we ran an interesting article on the preparation and decoration of gourds, those extraordinary and versatile relatives of the pumpkin. If that fired your imagination, the following information on cultivation will prove very welcome. And in case you are having difficulty obtaining suitable seeds, the author can supply readers with an enormous variety. It seems there is a gourd to suit almost any purpose.

The culture of the *Lagenaria* (hard-shelled gourds) is the same as that of other cucurbits (melon, pumpkin etc.) except that they need a longer growing season and plenty of room to grow. I have been growing gourds for ten years and have developed an interest in them that overwhelms even me — painting, dyeing, waxing, carving, and so on. All my gourds are biodynamically and organically grown.

Gourds should not be planted too close to other plants, since they have shallow feeder roots that run laterally. The worst enemies are mildew and wilt, and sometimes aphids and cucumber beetles. I set radishes as companion plants with the vines and have little trouble.

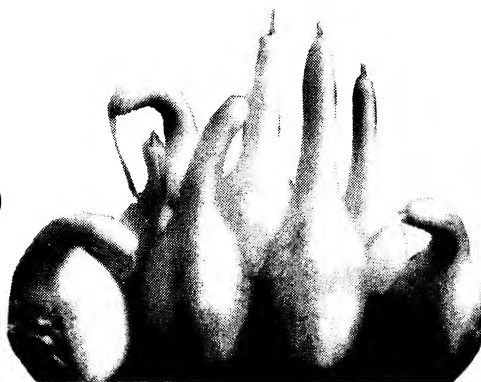
Lagenarias are prolific growers — the bigger the gourd, the bigger the vine. Some, especially the African varieties, can grow to 240 m (800 ft) in five months. I mostly grow the giant varieties on the ground. They are much too heavy for a trellis or arbor: some fruits grow to 84 kg (185 lb) in weight. The smaller varieties can be grown on a trellis. They love to climb and look great when covering a pyramid trellis, throwing their shadows of tendrils and velvet leaves.

I collect true seed by hand-pollinating to get my true strains. When the vine reaches 3 m in length it produces flowers; the delicate white blossoms open only in the late afternoon or evening when there are no bees to pollinate them. Thus artificial means of pollination must be carried out to achieve true shape and size (especially of the seeds you have planted). A tiny brush will do the trick. If pollination is successful the fruit will begin to grow, if not the fruit will shrivel and drop off within a few days.

When should the fruits be harvested? As mentioned earlier, *Lagenarias* take longer to mature than other plants of the cucurbit family. They should not be harvested till the tendril on the vine next to the stem is dead.

After harvesting the crop, the fruits are left to dry. A careful watch should be made for any signs of fungus. Any trace of fungus should be wiped off with a cloth. The gourds should also be turned every few days. Some take three years to mature, others three or four months. When they are dry the seeds will rattle inside. The most important factor in curing gourds is time: they cannot be hurried. A mature gourd will not decay.

Gourds have been used for many centuries by primitive man and modern man to carry, store, prepare and serve food, drink and medicine. They have been used extensively for the



construction of a number of types of wind, string and percussion instruments. They have unlimited decorative uses in their natural state as well as when altered by burning, painting, carving and finishing with special lacquers, waxes, and other materials. They may be pieced together to form art objects and utilitarian objects of great diversity.

Last season (Sept. to April) I grew 400 different gourds of 36 different varieties from all over the world. I give them names according to their shape and the origin of the seed, from Mexican water jugs, Corsican tobacco boxes and Indian sitar gourds to Japanese saki bottles and Nigerian mammoths.

Gypsy Jessop has for sale a wide selection of gourd seeds of many shapes and sizes, and also cured and dried, dyed, painted and carved gourds. See Unclassifieds for details.



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TREES FOR SOIL CONSERVATION

by N.F. Enright, Inverell, NSW.

Trees and shrubs can be planted in many situations to improve the environment and lower the risk of soil erosion:

- near machinery areas, yards or buildings
- along lanes, roads and fencelines
- along creeks and watercourses
- near dams and in areas of gully fill
- as windbreaks in exposed areas
- in particularly eroded or unproductive situations.

Careful thought should be given to the species selected for planting. Major factors are drought resistance, frost tolerance, mature height, soil preferences and the purpose of the planting. As these features vary for each locality, advice should be obtained from a local Soil Conservationist or Soil Conservation Plant Nurseryman.

Spacing depends on the moisture available to the planting site, and the spread of the canopy of the mature tree. Generally 5-8 m metre spacings should be used, with the greater distance for the larger trees and for plantings in dry areas. In windbreaks, the smaller trees are planted in rows 4-6 m away from the rows of taller trees and planted opposite spaces between the larger trees.

Site Preparation

All grass and herbage should be removed from the proposed site to reduce plant competition and allow for better tillage preparation. Deep ripping with a chisel plough or other suitable implement increases rainfall infiltration. The soil should be moist when ripped to avoid the subsoil breaking into large clods and tending to come to the surface. The surface should be cultivated to kill weeds and assist moisture retention.

When planting single tree seedlings a hole 40 x 40 cm (16 x 16 in) should be dug to a depth of 40 cm (16 in) with the soil in the bottom loosened to give a planting depth of 20 cm (8 in). This allows water to infiltrate and enables the roots to penetrate quickly after the tree is planted. Many farmers use an auger type post-hole digger to dig the hole. As this technique forms a clay seal on the walls of the hole, the walls should be broken or chipped into the hole to allow lateral root penetration. Planting the tree seedlings in rows simplifies aftercare and cultivation.

Secure fencing of the area to be planted is necessary to prevent farm animals from eating or rubbing the young trees. If rabbits or hares are known to be in the area then netting is required.

Planting

Tree seedlings are normally supplied in 15 cm (6 in) tubes which contain only a small amount of soil. They should be watered daily until planted. Because the small tubes contain only limited nutrients the seedlings should be planted out as soon as possible. The tube should be removed without disturbing the roots and the seedlings placed in a hole to a depth of 20 cm (8 in). Soil is placed around the tree up to the top of the tube soil and pressed down firmly. A dish shape can



be formed in the soil to hold moisture. The tree should be well watered at planting.

The best time for planting trees and shrubs is when the soil moisture level is high and evaporation low. Generally March to September is the best planting time but dry periods or periods when frosts are likely should be avoided. Some farmers prefer advanced seedlings and produce these by transplanting tube seedlings into larger pots or thick walled plastic bags (superphosphate bags one-third filled with soil) and grown as pot plants in a sheltered area near the homestead for four to six months.

Generally trees will grow satisfactorily in soils containing less nutrient than that necessary for crops or pasture. On soils of very low fertility a complete fertiliser in the form of slow-release tablets will increase growth. These should be placed in the soil about 10 cm (4 in) from the base of the tree. However, in most cases fertilisers should not be applied at planting. A balanced fertiliser can be applied if necessary when the plant is well established.

Aftercare

Trees should be watered each alternate week in dry periods for the first year. Care should be taken not to let the tree seedling wilt as many species fail to recover when watered. A fortnightly good soaking with water is better than frequent shallow waterings and will encourage a deep root system to develop.

A mulch of straw, animal manure or stones may be applied to reduce wind movement over the soil and retain moisture. Weed growth around seedlings should be kept to a minimum by shallow cultivation or hoeing until the seedling is established. A frost protection cover using hessian or plastic weave should be supplied for frost-tender species. However, the planting of frost-tender species in severe frost areas should be avoided.

As tree growing requires some skill and labour only a small number of seedlings should be planted initially until experience is gained. The number of trees grown should be limited to that number for which facilities are available to water all planted young trees during a drought.

Reprinted from Journal of the Soil Conservation Service of NSW, Vol. 37, No. 4, October 1981, PO Box 12201, Royal Exchange, Sydney 2000.

WATER TANKS — HOW NOT TO BUILD THEM

by Irene Maxwell, Healesville, Vic.

Having just finished reading the article *Plastic Water Tanks* in GR No. 32, I must write to tell you of our experience in cheap, do-it-yourself water storage. We started with the idea of building a brick tank capable of holding 10,000 gallons. It sounded simple, and would have been very cheap to construct — or so we thought.

We built the tank in two weekends, with plenty of help, after having a slab laid and cured previously. It looked grand, and was ready to hook up, when my sainted father gave it a measuring glance and told us, 'It'll need reinforcing — Weldmesh and chickenwire with a cement render. Then you'll be right!' Since he had consulted several structural engineers, we thought it wise to follow his advice.

Weldmesh is not cheap, and it is very tough to work with. When you try to butt it up tight against your brickwork it will refuse to go any closer than 5 cm or so. Imagine the loads of cement required to cover it! At the base, the render is up to 15 cm thick, and that means bags and bags of Readymix.

Nevertheless, the finished item was still reasonably cheap. Full of cheer and bright optimism, we hooked up the pipe from the spouting. As luck would have it, it rained buckets. The tank half-filled in one night's extravagant downpour. The next day it was empty. We were shattered. How? Why? What did we do wrong? We were broke by this stage, so an entire summer passed with an empty tank and me lugging a plastic container of water into the kitchen and out to town for refills.

Needless to say, having invested considerable money and a hell of a lot more back-breaking labour, we were considerably disheartened. Eventually we saved up and bought a heavy-duty vinyl pool liner, which took hours to install working by oneself — as one edge of the vinyl was propped over the lip of the tank, the other side would flop down. So I propped the edges of the liner up with bricks to hold them temporarily in place. Wrong! Vinyl has a life of its own and weighs a ton. Down came all the bricks, and the liner . . . start again . . . and so it went on.

Finally the liner was in place, the pipe connected and, right on cue, it rained buckets. (Healesville's like that.) The tank received a respectable 60 cm of water — lovely! The next day, it had all gone! The liner had torn on the render, and had been pierced by falling bricks; it was totally useless.

We were at our wits' end. We believed we had a complete flop on our hands, sitting there behind the house like some malevolent spirit.

Then, coming alive again from the depths of depression, we rang around to pool builders and the like, thinking they would at least know their business, and might advise us accurately. We found out that they are extremely busy people, but with luck and persistence, we found a man who



was willing to come out and look at the tank. Bless him! He came out one weekend, peered into the (empty) depths of our tank, looked up, and gave us a quote (see price list at end of article). The next weekend, he came up, hopped into the tank, and a few hours later hopped out again — all done.

Our tank is brimming over with sparkling clear rainwater now. Want to know how much it cost (in terms of money, that is)?

Base reinforcing	40
Base cement, delivered	140
Bricks (new seconds)	250
Delivery of bricks	60
Cement	250
Bondcrete (at least)	100
Reinforcing (Weldmesh)	80
Chicken-wire	40
Vinyl liner	250
Professional to render	150
Extra cement	100
Bought water (which leaked away)	40
Grand total	\$1500

At the time, we could have had a 10,000-gallon concrete tank built on site by a reputable contractor for \$1000. To our total figure must be added months of hard work involving seven or eight people (unpaid), plus all the disappointment and agony. The venture was far too costly. Where did we get the original idea — *Grass Roots!* The moral? Get a professional *first*.

WATER TANKS WATER TANKS WATER TANKS

MAKE YOUR OWN 6000-GALLON WATER TANK

by Alec Taylor.

First you have to make up a mould. We used sheets of corrugated iron 350 cm x 365 cm (11 ft 6 in x 12 ft). Ask your plumber or building supplier for rolled sheets, for a section of a tank — but not joined. Plastic conduit in 75 mm (3 in) lengths and bolts to fit are also needed, as well as reinforcing mesh for the concrete. In order to keep the inner and outer pieces of iron apart, and have an even wall thickness, we bored holes in the iron and inserted the plastic conduit and bolts after inserting the reinforcing. We had already made a platform of cement 1.8 m (6 ft) deep and painted it with Lokcrete to get a good bind. The mould was set in place and we were ready for our first pour. The mixture we used was four of builder's mix to one of cement and we poured it in, making sure it was well tamped down. That was Saturday No. 1. On Saturday No. 2 we removed the moulds and sat them on top of the already formed section, added more reinforcing and poured again. We repeated this twice more, so we had a tank four sections high. Incidentally, the mould must be well oiled before pouring in order to prevent the cement from sticking.

The whole then has to be sealed with Lokcrete, after the bolt holes have been filled, and then finished off with a smooth mortar. The tank should then be completely watertight.

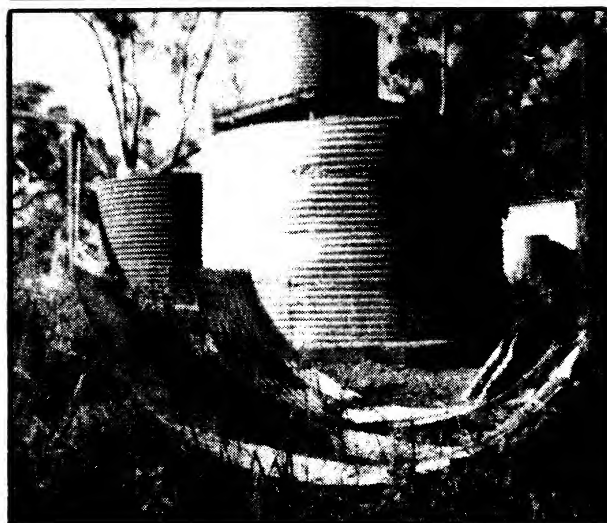
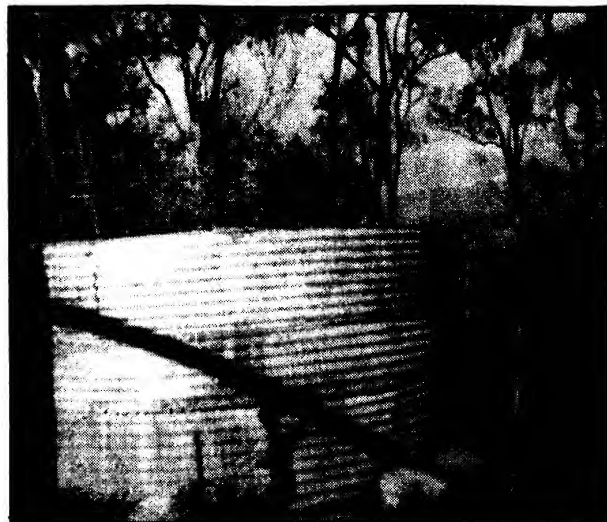
Now for a roof. We shaped the reinforcing mesh into a cone and shaped fine chicken wire and placed it on the mesh. The cement mix was then patted on, leaving a place for a strainer.

All we had to do then was to insert a tap in the bottom and wait for rain. This type of tank is quite inexpensive and satisfying to make, when it works, even though tempers may fray!

Photo:

Top: Our home-made cement water tank three-quarters complete.

Bottom: The tank, almost complete, with moulds in the foreground.



To have faith is to have wings.

James Barrie.

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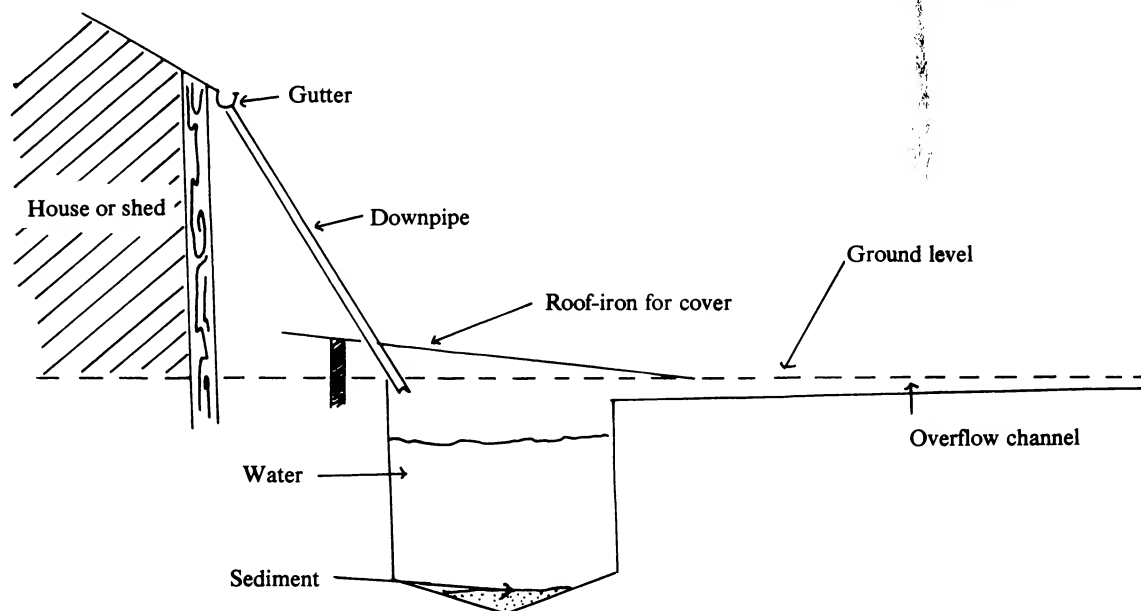
RAINWATER TANKS

by The Greive Family

Many old properties which are bought cheaply in the bush (or for that matter in towns) have no water laid on and only some old and dirty water tanks. It is not necessary to scrap these tanks and replace them with new ones. Have you considered lining the insides with a cylinder welded from heavy-duty sheet plastic? The cylinder should be slightly wider than the interior of the tank so it is not stretched or ruptured as the tank fills with water. If your property has no tanks, or if they are structurally unsound, then construct underground tanks using the heavy-duty plastic. At least 60 cm (2 ft) from the house walls dig a hole of suitable size (perhaps 2 m³ or approx. 64 ft³ in wet areas). You can estimate the number of tanks and the size required by

observing the average capacity of rainwater tanks on neighbouring properties. From the lip of the hole, dig an overflow channel to ensure that the excess water is led well away from the house foundations. Line the hole with splinter-free timber framing and insert the plastic. The downpipe from the guttering is led into the hole. Retrieval of water may be by small hand or foot pump (don't ask me what to do if you have large hands or feet!) or by the traditional bucket-and-rope technique. In drier areas the latter method might be preferred as it suppresses the temptation to waste water.

A word of caution: If your underground tanks are going to be deeper than you are tall, act sensibly and have a friend nearby every minute you are digging.



REPAIRING A WATER TANK

by Justin, Janet & Neil, 'Lothlorien', Tara, Qld.

We solved our water problem early by buying a second-hand tank and painting the inside with Bondcrete and cement: a 2000-gallon tank cost us \$50. This serves for drinking water, and we are awaiting our dam before putting down another garden!

About the \$50 tank. We bought it, riddled with holes, from the local plumber for \$20. We thoroughly cleaned the inside with a wire brush. After pushing a screwdriver through all the holes and suspect rust spots we plugged them with a thick paste of Bondcrete and neat cement, giving this about 24 hours to set rock hard. We mixed the Bondcrete 50-50 with water, and mixed enough cement with it to make a thick brushable mixture. It was important to mix small quantities at a time, since the mixture begins to set rather quickly (it is

workable for about 20 minutes). We painted two coats liberally onto the walls and the floor. Each coat was allowed 24 hours to dry before the second coat was applied. This method takes three litres of Bondcrete and half a bag of cement for a 2000-gallon tank. Cost is about \$30. It works well, but there is a slight taste to the water for a while. It would help if the tank could be filled to overflow. Ours hasn't filled up yet, as we haven't enough catchment, but we are working on that. There are other ways to repair tanks, but I have learned to listen to the older people in rural areas; they usually have a lot to tell and can save a lot of needless spending.

A useful place to look for old repairable tanks is the good old country tip.

* * * * *

HOW TO REPAIR RUSH SEATING

by Kate Thomson, Biloela, Qld.

Rush-seated chairs can be brought back to first-class condition, keeping the 'rush' look, by using woven seagrass. The material is available from craft supply shops, and comes pliable and ready to be woven, needing no special preparation. For the average size chair, you will need about 2 kg (4½ lb) of seagrass. If you cannot obtain seagrass or you do not care for it, you can use rope.

After stripping away all the rushes you may find strips of wood nailed to the edge of the chair frame. If they have not rotted with age, prise them off carefully and keep them for later use.

If your chair is the simple square-framed variety, begin at the front, left-hand corner (A), and lay the first strand of seagrass (or rope) over the front crossbar, giving it a good firm clockwise twist between your fingers as you do. Continue to twist as you lay it around the frame. As shown in Fig. 1, take it over and around the left-hand crossbar, emerging underneath, and then directly across to B, but do not twist as you complete this part of the weaving.

At B work the seagrass in the same fashion as at A: over and around the right-hand crossbar, and, after coming back over the long strand running from A to B, over and around the front crossbar (Fig. 2).

Remember to twist the seagrass in a clockwise direction as it goes over and around the crossbars, but do not twist on the long straight lays. Continue at the corners C and D as shown to complete one circuit.

Repeat this procedure around the frame as in Fig. 3, making sure that the strands are pushed tightly up against each other. When you need to join a new strand onto the old strand, tie them together with a reef knot, but make the joins occur on the underside of the work.

Because of the thickness of the wooden frame, there will be a gap between the upper and lower layers of seagrass. Stuff this as you go with bundles of seagrass from broken pieces and offcuts, pushing the stuffing in firmly with a blunt object. The firmer your stuffing, the less the seat will sag later on.

If the seat is not square — that is, if the front and back are longer than the sides, weaving on the sides will be finished before the back and front. In this case you are left with the centre to be worked from back to front as shown in Fig. 4.

If your chair is wider at the front than at the back, you can solve this problem by wrapping an extra round into the pattern at the front two corners, until the space you are left with is a true square or rectangle (Fig. 5).

Some helpful references are:

Chair Caning, Garden Way Bulletin A-16.

Cane and Rush Seating by Margery Brown, B.T. Batsford, London.

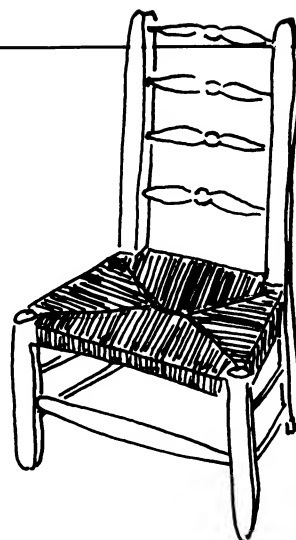


Fig. 1

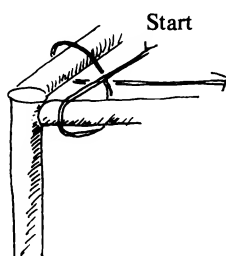


Fig. 2

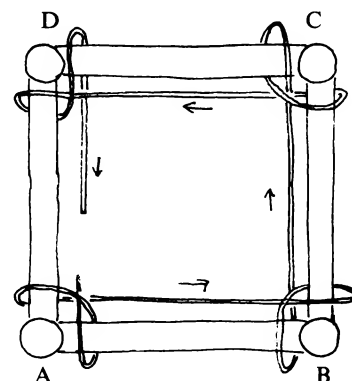


Fig. 3

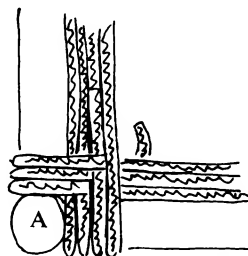


Fig. 4

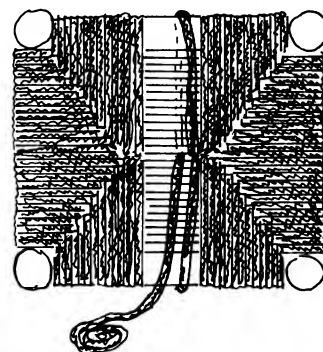
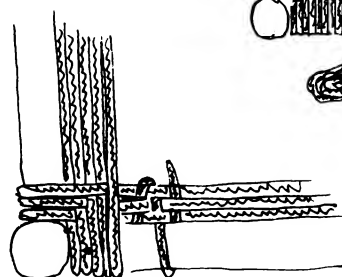


Fig. 5



DONKEY DOINGS

by Wendy Baker, Mylor, SA.

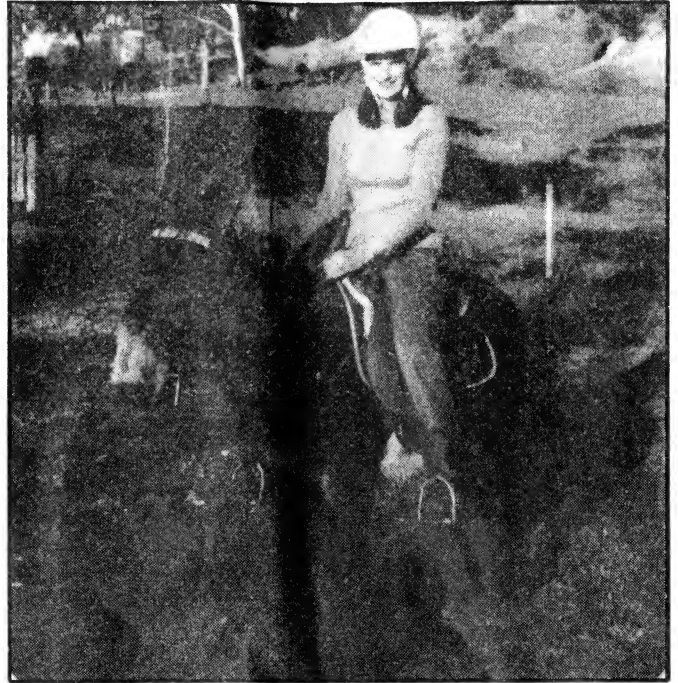
When I owned a horse, I must admit I scarcely gave donkeys a thought; I regarded them as 'sweet', rather like an ornament. However, after the death of dear Ben, my husband suggested keeping a donkey and I was attracted to the idea. Now after five years I have grown so accustomed to long ears and dainty feet that somehow the tiny ears and large round feet of the local horses seem faintly ludicrous!

We contacted the Australian Donkey Breed Society, SA Branch, and spoke to a real enthusiast who loaned us one grey Pongo for a few months. One either loves donkeys or does not — once one knows them there is no half measure. We found Pongo endearing, childproof, rideable and inexpensive to run — certainly the antithesis of the idea popularly held of a kicking, stubborn, useless animal.

Taffy was duly bought, and arrived as one of a wild bunch from the north. Having had one long trip to our friend's property he had no intention of leaving again and jumped a 4 ft. wire fence to avoid being loaded into the float! However he was gently manhandled in and floated slowly to Mylor where, shivering with fright and mistrust, he was almost poured out into the horseyard. We left our scared, scruffy-looking donkey-person to get over his trip while we had our tea. Acting on advice we confined Taffy to his yard for two weeks. During that time *all* sustenance came from me: he was *totally* dependent on me for all his needs. I was pregnant at the time and happy to take things slowly, probably the best thing that could have happened, for donkeys cooperate most when you pretend you have nine days in a week and nothing else to do.

In the first few days I used to take my lunch out to his yard and sit on a box to eat, reading my book, with chaff and hay at my feet. I totally ignored Taffy and he came to me, not the other way around, which meant that I gained his trust very quickly. He never had any bad experiences from us, so therefore he accepted anything we did or put on him. He slipped his nose through a headcollar to get to his chaff, and it all seemed quiet and natural. At the end of the fortnight, when I could take the headcollar on and off at will and lead him round the yard, we released him into the three-acre paddock. Ten minutes later he allowed himself to be caught fairly easily with food, and later came up to us wanting a cuddle. Basic training done!

Because of a donkey's strange shape (no wither, narrow girth) a military saddle is the best riding saddle, fitting most donkeys comfortably. Taffy accepted the saddle and crupper necessary to keep it from sliding forward, and the bridle. Although I was able to use my horse's old bridle, most people find they need to use a pony bridle with a horse browband. The bits need to be very small; mine is a Smith & Brehens military driving bit with a mullen mouth (much kinder than a jointed bit). I smeared the mouthpiece with molasses and he has loved me ever since! The curb chain is too long, with half its length dangling down after it is correctly fastened! The first time I mounted Taffy I was a trifle scared, not being the most



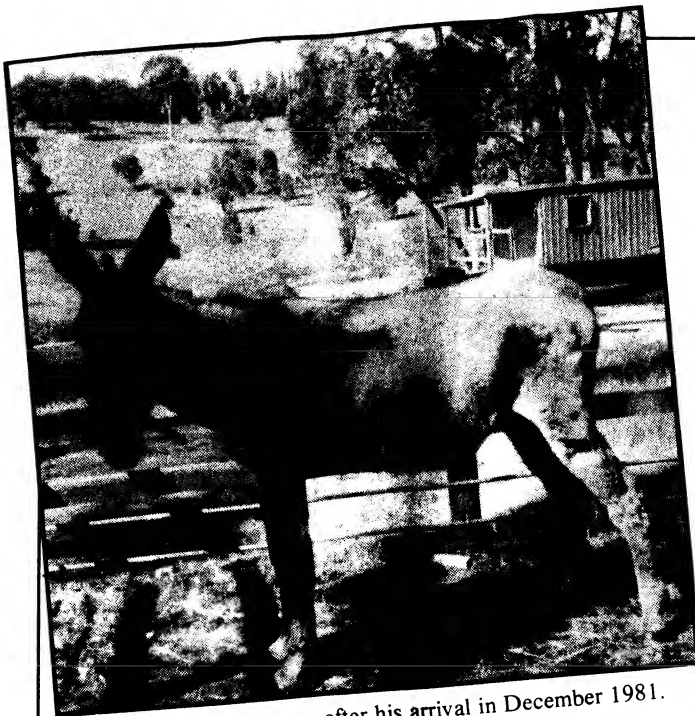
Wendy astride Taffy soon after he was broken in.

athletic mother of two, but need not have worried as he took a while to wake up to the fact that he was meant to walk on with this peculiarity on board. Finally he obligingly walked on and kept going until I stopped him.

Before he could be properly trained Taffy had to be gelded. It is the most unkind, unwise thing to do to leave a donkey jack entire, the exception being breeding jacks of quality show standard for stud purposes. As he becomes older an unworked jack can become very aggressive and unreliable and a danger to children, small animals and gelded donkeys, because of his strength and frustration. There seems an alarming number of adverts in the papers for young jacks for sale, described as ideal pets for a child. They are *not*!

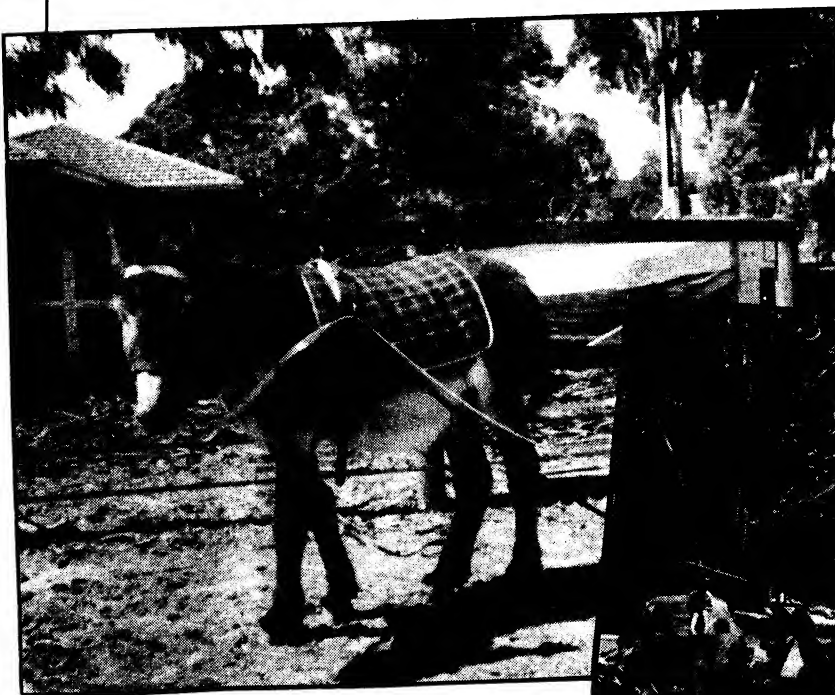
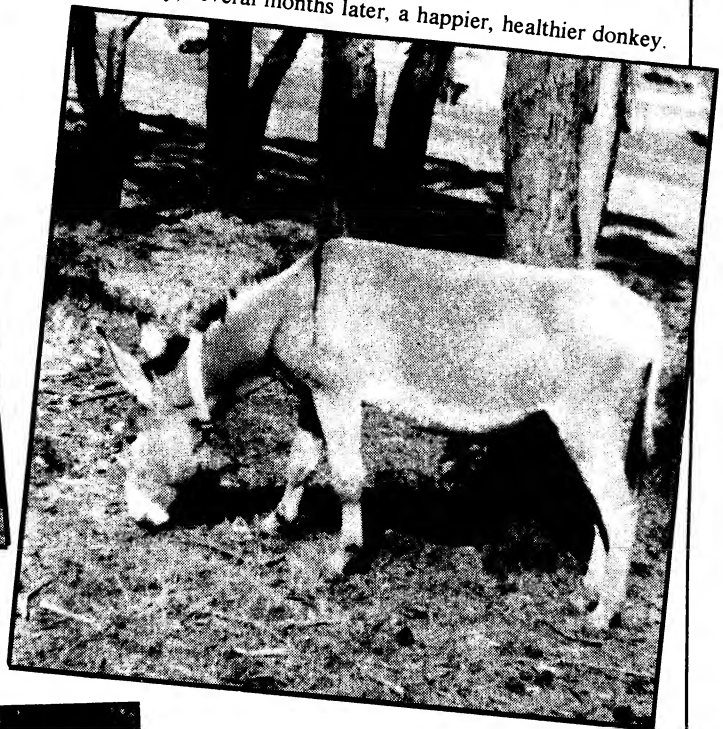
We were under the impression that Taffy was a two-year-old, but inspection by the vet during the operation revealed that he was five. It is important to engage a vet who has had experience gelding donkeys: they may be unable to tolerate some anaesthetics and have been known to die. John and I assisted the vet but despite a successful operation and antibiotics he (the donkey!) contracted a bad infection from our dusty paddocks. For two weeks John had to catch him, lead him to the only small patch of lawn we possessed, and flush out his wound with the hose, injecting him daily on alternate sides of the rump. As if Taffy knew John was helping him he succumbed to this uncomfortable treatment with patient resignation and became very firm friends with us all.

A good farrier is essential for a donkey's feet. The best horse farrier in the country may be no good with donkey feet if he has had no experience; we are lucky in having a farrier who



Poor skinny Perry soon after his arrival in December 1981.

Perry, several months later, a happier, healthier donkey.



Left: Taffy wearing the basic driving gear – lungeing roller, breastplate, driving reins and a trailing wheatbag just out of the picture.

Right: taffy going through his paces at the 1980 Christmas office party. Note the long queue of eager riders.



worked with donkey and mule teams in India. He is blessed with the patience necessary and deals with four feet in five minutes flat. To my knowledge he does not use ropes as some farriers do. Nine times out of ten donks do not need to be shod but their hooves must be trimmed every six to eight weeks. Watch them for rapid spring growth in wetter areas, as they are basically a desert animal.

Taffy eats very little, running on the smell of a chaff bag. One biscuit of meadow hay a day seems quite adequate, although I would feed chaff if I were working him regularly. Donkeys can founder in the same way as ponies — in fact Taffy had to spend a month in a starvation paddock, with *no* handfeed whatsoever — because he was grossly fat on grazing only. Some donkeys eat a lot more than this, but in the main their requirement is for adequate roughage. In the natural state the donkey is a foraging animal, as is the goat. This does not mean they can be dumped in two acres of bracken and expected to thrive; food needs to be low-grade, not poor-grade!

All donkeys need to roll as part of their survival routine. A dusty layer keeps the flies away; a horse will stand up and shake violently after rolling, but not a donkey. He may waggle his ears, but that's about all. Flies are a nuisance around their faces and in a bad season Taffy has rubbed his nasal ridge raw in places. Now, every November, I make up a fancy fly veil out of net-curtain material sewn to a piece of canvas with ear holes cut out, elastic under the jaw, and tapes to tie under the throat. He wears it in the fly season until it falls apart in the blackberries, and seems to like having it on.

Regular worming is essential (I use the commercial paste wormers, not particularly GR, but safe, easy and effective), along with dusting for lice. Any donkey can get lice, but dusting along the dorsal stripe and in the mane can help prevent it. As they can lick themselves, use a powder that is safe for cats. Some people wash their donkeys but mine is so tormented by water (and it's very easy for them to catch a chill) that I prefer the powder.

Our hills winters are very cold and wet and I like to rug Taffy in midwinter. Some donks will go into shelter sheds, but Taffy ignores his and prefers to stand under the pines, a legacy of being wild for five years, I should imagine. Taffy in the rain is pathetic: he stands drooped with his tail *under* his belly and his chin touching the ground; he refuses to eat when it's raining and went without a lot of food during his first winter here! After I had a rug made for him he ate properly and has been happy during subsequent winters.

An absolute no-no is to leave a headcollar on a donkey; we have heard tales of unattended donkeys being caught up and choked when trying to scratch their ear or eye with a hind leg (yes, they do it often). If the animal is hard to catch, a not-too-loose neckstrap left on in the paddock seems safe.

Taffy is a favourite with children at birthday parties and gave rides to countless kids at two consecutive annual Christmas works picnics for my husband's firm. As Taffy was not trained to float, John walked him to the picnic ground and back, seven miles each way, and he gave approximately 120 rides across the oval on each occasion. Both times he virtually led the way back home with John trailing along behind at the end of the rope (John figured it might be unfair to put his 17-



Taffy with home-made fly veil.

stone bulk on board an 11-hand donkey). We were finally loaned an old float to train him properly and once again we showed him that the only food he could have was in the front of the float. Within 24 hours he was going in and out of his own accord.

I am now training him for harness; I started by using an old breastplate, lungeing roller and hay-tie traces with a wheatbag full of stones dragged behind. Taffy accepted it so I had a set of webbing traces made with chains attached and a Permapine log swingle bar with some tyres joined on behind. I can now drive him around the paddock satisfactorily but a proper cart or sled will be slow in coming as John works long hours away from the place and has limited time and ready cash. I even collected manure in bags hanging from the stirrup bars on each side of his saddle; only when I came to lift them off did I appreciate the weight!

My young son Mark is now interested in riding and I took the trouble of buying a competition-style pony club helmet in case of falls. Contrary to belief donkeys can trot and canter, and jump limited heights, and a fall could have very serious consequences. Better safe than sorry.

We really were shocked when we acquired our second donkey, Perry, last Christmas. Naively, we thought he would be company for Taffy now we have sold our ancient milking cow, overlooking the fact that Taffy had had five years as the sole equine object of our attention. Perry was friendly enough but Taffy, after greeting the new arrival as if it were a jenny and he a jack, decided that the next best thing was to kill it. After three days together he could bear the intruder no longer and bit him savagely around the near hind leg and rump, resulting in a vet having to give Perry an anti-tetanus shot.

For poor Perry it was traumatic as he had had an unhappy past. Not quite three years old now, last year he was rescued from a butcher by kind-hearted but totally inexperienced people. They kept him on a tether for long periods as they couldn't control him. Evidently he was moved from spot to spot by means of attachment to a car bumper. At this time he

Continued on page 39

STRETCHING MUSCLES for HEAVY WORK

by Bob Anderson, California.

How many times have you come in from a hard day's work (perhaps in the cold), felt a stiffness in the lower back, and then spent days or even weeks waiting for the pain to subside? And how often have sore arms slowed down your shovelling, or pitchforking, or woodsplitting, or a sore neck made outdoor movement awkward? Often you are not even aware at the time these injuries occur. You are in the midst of a project, the adrenaline is working, you want to complete the job at hand. You may have felt a slight twinge, but you ignore it and keep working. It is only later — that night, or the next morning — that you feel the stiffness and pain.

Daily tasks like digging, heavy lifting, building or driving heavy equipment can put tremendous stress on the muscles and joints of your body. Anyone who works outdoors can attest to the need for a strong and resilient body to perform the many tasks associated with homesteading, farming or gardening. One need only be injured to appreciate the value of being physically strong and fit.

Most of us have at one time or another neglected to be physically prepared for hard work and paid the price in stiff back muscles and lost work time. Muscular stiffness and soreness result when the muscles begin to lose their suppleness and elasticity. This is due to the inability of the muscle tissues to lengthen and relax normally after being held in prolonged shortened positions. Stiffness — or you might say loss of a youthful range of motion — is more a matter of neglect than age. Even a few years working in a restricted range of motion, such as hammering, shovelling, and so on can cause the muscle fibres to be shortened. For example, if you did push-ups, and with each repetition failed to straighten your arms out fully, you would gradually lose the ability to straighten your arms.

Correct stretching keeps the muscles and joints adaptable to stress by maintaining normal blood flow. It helps maintain an efficient range of motion so that tight muscle fibres are not strained when work demands change. A strong, supple muscle has greater ability to adapt to changing degrees of stress because it can stretch farther and contract more fully. Tight, tense muscles that lose the ability to lengthen normally are strained easily because they cannot stretch (give) under stressful conditions. Rigid muscles tear more easily because they have lost their ability to elongate.

It is very important to stretch the muscles gently every day and especially before *and after* hard work. If the muscles are stretched often enough the tissues will not lose their ability to perform normally. Unfortunately, few people know how to stretch in a way that is both enjoyable and beneficial. Whereas any athlete knows the value of stretching and warming up for sports or competition, little importance has been attached to proper preparation for heavy outdoor work.

Regardless of your age, proper stretching can free tight, tense muscles and joints. With age and/or inactivity, the body gradually loses its range of motion; muscles become less flexible, thus tight and weak. But the body has an amazing capacity for recovery of lost flexibility and strength if a regular programme of fitness is followed.

Stretching does not emphasise difficult positions or encourage compliance with an 'ideal'. It can be adapted to what you can do; you need learn only a few basic techniques and the appropriate positions to stretch the muscles you will be using most. There is no special skill involved, nor must you be a highly trained athlete. You need not compare yourself with anyone else, since we are all different in terms of flexibility and strength.

We can learn a lot by observing animals. Watch a cat or a dog. They instinctively know how to stretch. They do so spontaneously, never overstretching, continually and naturally tuning up muscles they know they will have to use.

To stretch correctly, go to a point where you feel a *mild tension* and relax as you hold the stretch. You should not bounce up and down (as many of us were taught in high school), nor should you hold a sustained stretch that is at all painful. Both the bouncing and the painful static stretch can cause microscopic tearing of muscle fibres, leading to formation of scar tissue in the muscles you are trying to loosen. Stretching, when done correctly, is not painful. The phrase 'no gain without pain' does not apply.

When you begin to stretch, spend 10-30 seconds in the easy stretch. Go to the point where you feel a mild tension, and relax as you hold the stretch. The feeling of tension should subside as you hold the position. If it does not, ease off slightly and find a degree of tension that is comfortable. The easy stretch reduces muscular tightness and readies the tissues for the developmental stretch.

After the easy stretch, move slowly into the developmental stretch. Again no bouncing. Move a fraction of an inch further until you again feel a mild tension and hold for 10-30 seconds. Be in control. Again, the tension should diminish; if not, ease off slightly. The developmental stretch fine-tunes the muscles and increases flexibility. Your breathing should be slow, rhythmical and under control. If you are bending forward to do a stretch, exhale as you bend forward and then breathe slowly as you hold the stretch. Do not hold your breath while stretching. If a stretch position inhibits your natural breathing pattern, then you are obviously not relaxed. Just ease up on the stretch so you can breathe naturally.

At first, silently count the seconds for each stretch; this will ensure that you hold the proper tension for a long enough time and will allow the body to adapt to the slightly elongated positions naturally and safely. After a while, you will be

stretching only by the way it feels, without the distraction of counting. As you learn about your body, you will vary the lengths of time that you hold the stretches in accordance with how much tension is present. Generally, the longer a stretch is held the better it is for you. You may have to adjust the length of time I have suggested for each stretch to meet your own needs.

The major purpose of stretching is to reduce unwanted muscle tension and to free contracted muscle tissues so the body can perform its tasks naturally and efficiently. If you appreciate your body for what it does for you, you will take care of it and start a regular programme of gentle, controlled stretching.

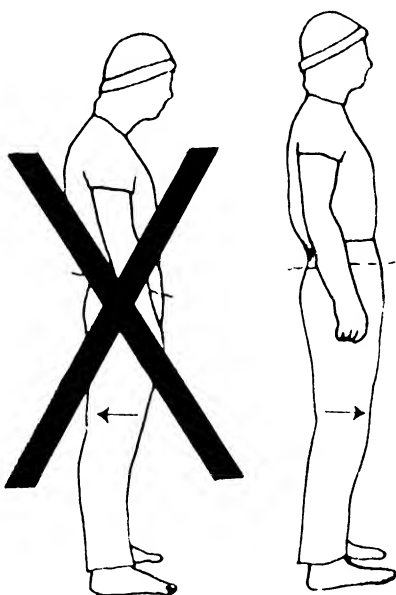
Get into the good habit of stretching a few minutes before beginning any strenuous work. This is especially important in

the morning or during cold weather. (Stretching signals to your muscles that they are about to be used.) Stretch occasionally while working; for example, while shovelling, take one-minute breaks to stretch the muscles doing the most work and you will return to work slightly refreshed and more flexible. In the evening after working, stretch the areas of the body that feel tight; this will minimise stiffness and help you feel and work better the next day.

Following are several stretches for the muscles most widely abused and strained in hard labour. Try stretching for about a month and feel for yourself the difference it makes in performing heavy outdoor work. Keeping your muscles supple and ready for strenuous activity will minimise the chances of injury and allow you to work more smoothly, efficiently and enjoyably.

SOME GENERAL TIPS FOR BACK CARE

Never lift anything (heavy or light) with your legs straight. Always bend your knees when lifting, so the bulk of the work is done by the big muscles of your legs, not the small muscles of your lower back. Keep the weight close to your body, and your back as straight as possible



Do not stand with knees locked. This tilts the hips forward and puts pressure on the lower back – a position of weakness. Bend your knees slightly. Use the big muscles of the legs (quadriceps) to control posture. Stand like this all the time; you will be ready for movement and protected against strain.

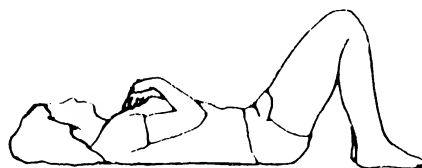
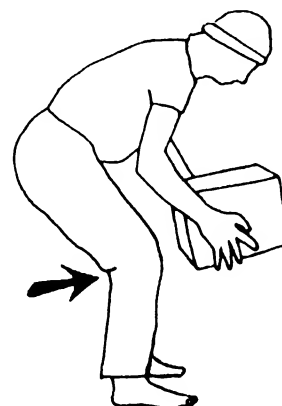
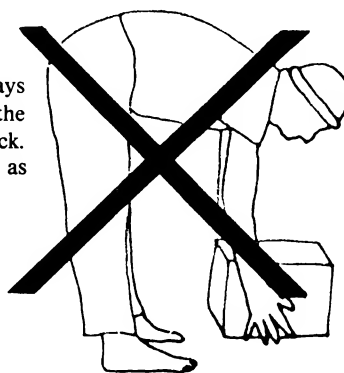


fig. 1



fig. 2

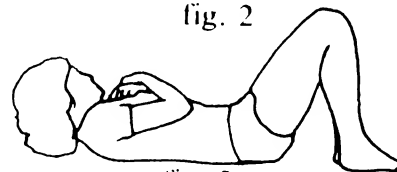


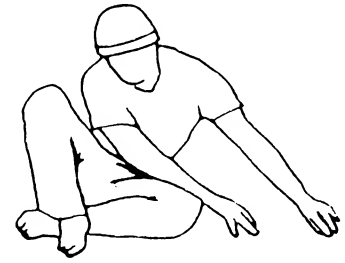
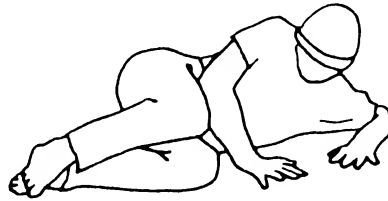
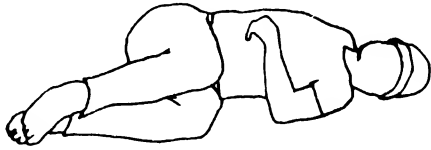
fig. 3

Strengthen your abdominal muscles because they give support to your lower back. The best exercise for this is the abdominal curl. Start as in Fig. 1. Curl up, bringing your shoulder blades off the floor about 30° (Fig. 2), then lower back down to the floor (Fig. 3). Do not bob your head up and down, as this may strain your neck. Keep your head in a fixed position. Concentrate on the *upper abdominals* (solar plexus area), curling your upper body forward with your chin close to your chest (Fig. 2). When you lower or uncurl your upper body, the

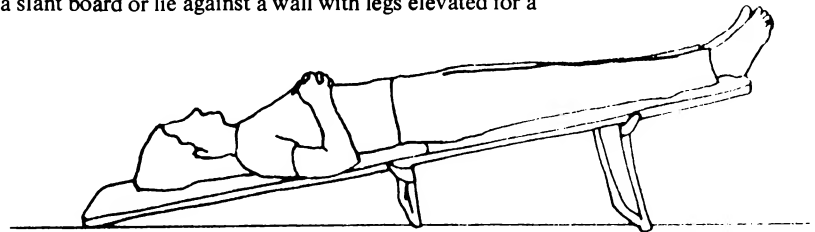
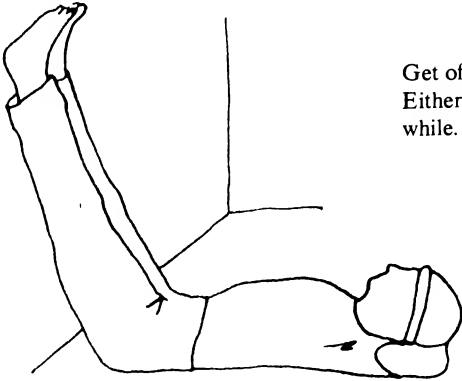
back of your head should not touch the floor because you are holding your chin near your chest (Fig. 3).

Do the ab curl at medium speed. Concentrate on the muscles being used and on developing body rhythm.

If your lower back is sore, here is a strain-free way to get up from a lying position.



Get off your feet a few times a day. It relieves lower back tension. Either use a slant board or lie against a wall with legs elevated for a while.



Be especially careful early in the morning or in cold weather. This is when many back injuries occur, when muscles are stiff. Also, when working and it starts getting colder, put on a jacket (such as a down vest) to keep your back warm.

Switch sides if possible when raking, hoeing, and shovelling, to equalise the strain.

The back is best protected by stretching before and after work, by getting off your feet several times a day, by sleeping on either side with knees bent (never sleep on your stomach as it puts pressure on the lower back) and by strengthening the abdominal muscles.

Bob Anderson is the world's foremost authority on stretching and author of the best-selling book *Stretching* © 1980, published by Shelter Publications/Random House-USA. The book is distributed in Australia by Tudor Distributors, 2a Woodcock Place, Lane Cove NSW, or is available through *Grass Roots*.

In the next issue we will look at specific stretches for arms and shoulders, lower back and neck, and for the legs.

Donkey Doings — continued from page 36.

was an entire jack and started the habit of rushing at people when they approached. He was not being fed properly and was in poor condition when rescued by the same lass who sold us Taffy. She had Perry gelded immediately, drenched, and floated him to us. He still has a basic mistrust of most males although the farrier is marvellous with him. Perry's very bad and pushy manners are improving with kindness and discipline. He is tall, about 12½ hands now and still growing, and has the strength to push me around rather than vice versa. Because of the short neck and low head carriage a donkey has more strength for his size than a draught horse. He is very touchy about the ears; although he will now accept a headcollar, my current method of bridling is to undo the *whole* bridle and, starting with the headpiece, put it on him piece by piece. The bit is the least of my worries!

I have ridden Perry, gingerly, around his yard and find him very bold and willing and more alert than Taffy. The power in him is very obvious. He adores being taken out for a walk, with a chain halter for control, and seems impervious to traffic and horses.

The latter is a point many people do not appreciate. Some horses and donkeys are *terrified* of each other, to the point of bolting. I have held Taffy, dismounted, with him sweating and

trembling, rooted to the spot in terror while an Evil Thing with Small Ears took fully ten minutes of coaxing by its alarmed rider before, snorting and half-rearing, it plunged past with nostrils flared and eyes wild, barely under control. Taffy, when mounted, is also uncontrollable faced with a horse. Very embarrassing. Yet he has grazed with a horse in the paddock.

Donkeys are patient, loving and cheap. They can be frustrating and adorable at the same time. Our vet told us that wild donkeys are a herd animal but retain individual independence more than wild horses. They have a real need for company, whether it be man, donkey or goat. They have need of food, and shelter, worming, foot trimming, and love, and also of work. Treated well, they can be wonderful companions with very long lives. These animals had the misfortune to be turned loose in our outback after years of service to mankind; if we wish to possess them now, let us return to them some of that service so gladly given in the past — otherwise they are better off shot for pet food. If anyone wishes to keep a donkey, I beg them to keep in touch with one of the branches of the Australian Donkey Breed Society which will, in a very friendly and informal manner, give all necessary advice and help to any enquirer.

DYEING WOOL WITH FUNGI

by Tony Young, Blacktown, NSW.

Having spent the past ten years or so studying fungi (in particular mushrooms and toadstools) as a hobby, it was inevitable that I should write a book on common Australian fungi. However in 1975, I built (and continue to use) my own spinning wheel, so it was equally inevitable that sooner or later I should combine the two interests and try my hand at dyeing wool with fungal material as the dye source.

Books on fungi constantly turn up at our home and I have to admit that the stimulus for my efforts on fungal dyeing came from an obscure booklet titled *Let's Try Mushrooms for Colour* by Miriam C. Rice. This is an American publication and deals with fungi available in the USA. There is also a paragraph on fungal dyeing in J.B. Cleland's book *Toadstools and Mushrooms of South Australia*.

If any *Grass Roots* readers would like to try their hands at using fungi for dyeing, I can promise them a rather exciting time. The results are frequently spectacular and very well worth the effort. I have described four species in this article, each of which I have experimented with personally, but there are vast numbers of different plants that could be examined for colour. You should remember though that whilst the fungus that you gather is strictly the fruit of the plant (the fungus plant is underground or in the log on which the fungus was growing), you are nevertheless removing the fungal equivalent of the seed-producing organs of a green plant, and overpicking can lead to a species becoming rare. So, always aim to pick only what you need, and leave the rest for nature's reproduction.

The dye pot

When attempting any sort of natural dyeing, you should try to use a dye pot made either of glass or stainless steel, or coated with enamel. Also, since some of the chemicals used (and the fungi for that matter) are quite poisonous, you should reserve the pot for dyeing only. Aluminium dye pots are not recommended (despite their cheapness), because aluminium reacts with some of the chemicals or dye molecules, and can greatly affect the final colour of the wool. This does not mean though that you must never use aluminium dye pots; there are occasions where you can, and I have obtained excellent and consistent results from an aluminium dye pot using only alum as the mordant.

Mordants

Before we move on to dyeing the wool, I should explain the function of mordants. Mordants are chemicals which, when either boiled with the wool prior to dyeing, or added during the dyeing to the dye pot, permit the dye molecules to 'stick' onto the wool fibres. Without mordants, many beautiful



dyes simply will not impregnate themselves into the wool. Typical mordants are alum, copper sulphate and potassium dichromate. Generally, you will get a different colour with each type of mordant from the same dye material. The wool is simmered in a solution of the mordant for about an hour, with the lid always on the dye pot to ensure that light is cut out as far as possible. The wool is then either dyed immediately or stored for some time in a damp state. Copper sulphate and potassium dichromate are mordants which should be followed by immediate dyeing, but wool mordanted with alum benefits greatly by being stored for two or three weeks in a damp state with the mordant solution still in the fibres. The colours are then much brighter and more intense. Occasionally, the storage interval may result in a completely different colour being obtained. Alum is thus slower to use, but it is also very cheap compared with potassium dichromate. Potassium dichromate does have the advantage however of being better able to bring out brown colours.

Given below are the amounts of mordant to use for 500 g (roughly 1 lb) of clean dry wool:

Alum	60-80 g (2-3 oz)
Copper sulphate	8-15 g (¼-½ oz)
Potassium dichromate	8-15 g (¼-½ oz)

Dissolve the mordant in 4-8 litres of water (1-2 gallons) and bring to the boil. Next add the scoured and pre-dampened wool and simmer with the lid on for one hour. Depending on the mordant used, you can then start dyeing or store the wool. You can dye immediately with alum if you wish, especially if you are after yellows or light greens.

The dye bath

The dye bath is easy to make— you simply break the fungus into small pieces and simmer in water until you are happy with the colour. Do not boil too long — sometimes this can ruin delicate colours. You can strain out the fragments before adding the wool; another very effective method is to place all the fragments into an old stocking and put that into the dye bath. The nylon is usually quite unaffected and all the fragments can be removed in one easy movement.

The fungi

The four fungal species I shall describe are *Hypholoma fasciculare*, *Pisolithus tinctorius*, *Polyporus australiensis* and *Scleroderma australis*. I admit these names look daunting but the plants have no common names in Australia. I have chosen these four because they are relatively common,

widespread (occur in all states), easy to recognise, and they give very good results.

Hypholoma fasciculare is a toadstool found growing in clusters on or near dead wood. The caps are 2-4 cm in diameter, smooth, yellowish to brownish, paler at the edges and generally have a distinct greenish tint. The gills (flat plates hanging underneath the cap) are a distinct yellow green in the early stages, but later turn brownish as the 'seeds' on the gills ripen. Its taste is a giveaway: it is intensely bitter. (Don't be frightened to taste: take a piece about the size of a pea and chew with the front teeth only. **Do not swallow!** Once you have the taste, spit out the fragments and any saliva in your mouth. Rinse out with water if you wish, but this is not absolutely necessary. Even the most deadly species can be tested in this way, but be careful as sometimes the taste can be hot and peppery.) Wool dyed from this species gives a lovely olive green when mordanted with copper sulphate. Potassium dichromate should give a range of browns or golds and alum golds or yellows. The colour may vary with the season.

Pisolithus tinctorius is a large puffball-like fungus found growing near gum trees or scrub box, usually on bare ground which is sandy or gravelly. It has long been known as a dye plant, hence the name *tinctorius*. It is 4-6 cm (occasionally 8 cm) in diameter and more or less round above ground, tapering into an underground stem or 'root'. At first it is white to off-white but becomes tarry black, especially where bruised. The stem may be yellowish. Touching the tarry black areas may stain the fingers brown. If you cut the plant in half, you will see that the flesh appears to be made up of lots of tiny rice-grain shaped 'packets' which can be pulled apart. The top of the plant may be ragged and dusty brownish yellow from the mature 'seeds'. In the hand the fungus feels heavy. This species should produce various shades of brown with any mordant.

Scleroderma australis looks like a golden brown puffball, often brown speckled, 2-4 cm in diameter. It grows in forest or woodland, usually of a eucalyptus type, and can be found amongst leaf litter on the soil. It has a thick leathery rind and if cut in half when young and fresh reveals a purplish black interior marbled with fine white veins. The 'seeds' are dusty brown at maturity. The outer coat splits open raggedly at the top when mature. When copper sulphate is used as a mordant, a light green results.

Polyporus australiensis is the most spectacular dye plant of them all. The fungus grows as a bracket or shelf on logs, especially after rain on those charred during a bushfire. Its upper surface is off-white or orange white. The undersurface is bright orange with thousands of tiny holes. This fungus can be quite large, with occasional specimens up to 12 cm across. The smell is very distinctive and strong. It is musty, pungent, sometimes faintly sweetish and not at all what one would expect from a fungus. The flesh is white but filled with a copious orange juice which stains anything and everything it touches — it even effects nylon stockings used as containers in the dye bath. It does not appear to need a mordant, but alum and potassium dichromate are equally good. Even a small fragment will yield very large amounts of dye. Softer colours result as the dye bath becomes progressively exhausted. The

colours are brilliant and very intense oranges to yellows.

I hope readers try out these dyes, and should they try any other fungi for dyes, I would be very interested indeed to hear of their results. You can always send fungal material to me for identification if you wish. The material should be dried (include at least three or four specimens) and you should also send a description of the material when fresh: colour, size, shape, smell, where found, date, what the plant was growing on and who found it. My address is A. Young, 69 Narcissus Ave., Blacktown 2148.

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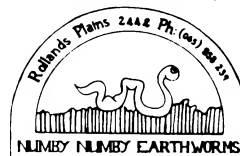
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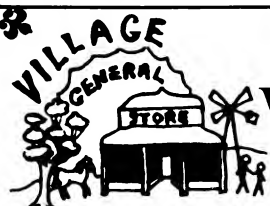
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EQUIPMENT, MONEY and SELF-SUFFICIENCY

by Andrew Blair, Wangaratta, Vic.

Many of the stories and articles we publish in Grass Roots come from the alternative handy person, a rare species of worker who enjoys tinkering with objects to gain an understanding of how they work and who develops this do-it-yourself skill to solve construction problems in the back yard or farm. Articles on fencing, building, alternative energy, pumps, generators, kero fridges, hot-water systems and windmills in former issues have come from such people. In this article Andrew Blair highlights the other side of the coin — the problems that can befall the unwary newcomer when enthusiasm is abundant but practical knowledge and experience in shorter supply.

Many people aim for a self-sufficient lifestyle because they feel that they have had enough of living in a city. Some opt out of their city job, with the money and assets that they have accumulated, to seek a closer relationship with nature and a more self-sufficient existence. Others retain the city job but live in a rural environment, while some decide, at a comparatively young age, to avoid the rat race and go bush, often with little or no financial backing.

To grow food in the form of eggs, fruit, vegetables, milk and meat can not only save money and provide food free from suspect additives, but also bring the grower much satisfaction. The erection of fencing, the organisation of water and power supply, and the building of a house provide a lot of interest, and you can save money by doing it yourself.

As always, however, reality is not quite so simple as theory. If you enjoy making things and using equipment, then self-sufficiency is a reasonable goal. If on the other hand you are doing jobs yourself only to save money, and you don't have much in the way of skills or experience in the area, beware! You could find that doing it yourself costs you *more*. In no way am I trying to suggest that people should not do their own constructional work — frequently the final product will be of much better quality than if a tradesman had been employed, especially if the tradesman was the cheapest one available. What I am suggesting is that to do a job well, experience is required. If you do not have the required experience you will have to pay somewhere along the line to obtain it. You will pay by having someone do the job for you, or you will pay in money and time acquiring sufficient knowledge before you start, or else you will pay by having to rectify mistakes made as you go along.

The best way to gain the experience you require is probably to work with an experienced person until you feel that you have enough knowledge to go it alone. Another method is to discuss your ideas with an experienced person, but you will pay with your time, and they with theirs. The seller of equipment may have considerable experience, but often it is with only one brand, and even if his brand is not the best he will be forced to pretend it is, as his livelihood depends on selling his product. Listen to the advice of the salesman, but treat it with care. An obvious person to ask about equipment you are thinking of buying is an existing owner. Here again problems can occur. Many people, having made a purchase, are unable to admit having made a mistake. In

many cases they will not even admit it to themselves, let alone to other people.

Some government departments supply information which is very useful, but from others the information is based on theory and is not very practical.

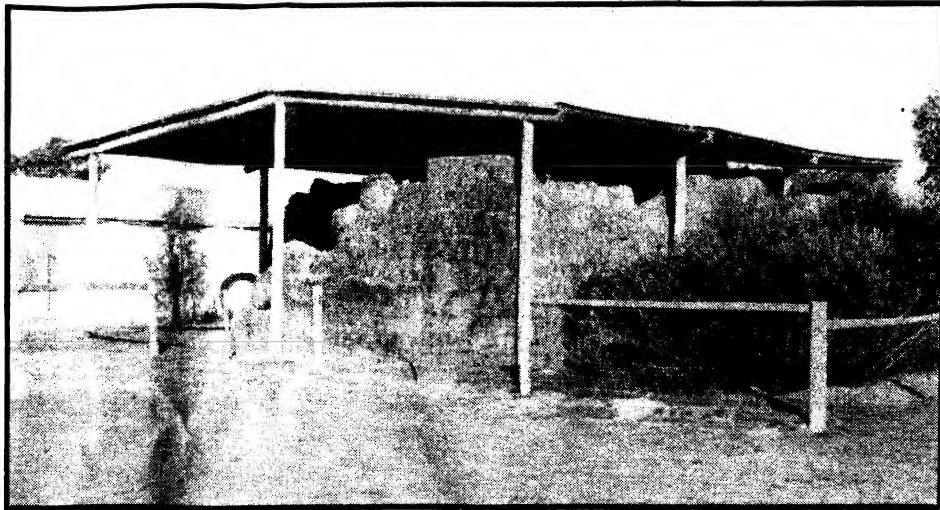
In the area of equipment or installations probably the best person to consult is the **thinking** tradesman who is interested in his job, but not tied to a particular brand or company. You will have to decide whether this person is interested in solving your problem in the best way or whether he is using a standard solution that he uses on everybody's job, whether it suits the job or not.

In turning to people for advice, don't expect it for nothing. If a tradesman gives you advice, pay him for his time, or give him the job. If it is a salesman, don't turn round and buy elsewhere where the price is less but where the advice is not worth having. If your adviser goes out of business, then he won't be there when you want him next time. If his prices are too high, tell him. If you are not prepared, or not able to pay a person for their experience, go ahead without it, but it is likely to cost more in the long run.

I am reminded of an owner-builder who decided to glaze his own windows. He learnt a lot about transporting and putting glass into window frames. If he had asked the local glazier to do the job from the start, it would have cost less than all the travelling and the additional sheets of glass that were required to replace those he broke.

There is probably nothing of greater importance to rural people than their water supply and because I could write an article on the mistakes that I have made with our water supply, I'll leave it for another time. I have gained enormous experience along the way. In places that experience has cost us dearly. The conclusion that I have come to is that the purchase of good equipment from the start has been well worthwhile.

With water supply, as with anything else, we try to envisage future requirements and avoid temporary setups. Invariably a temporary job is done in a slipshod way to save time and money. If we do not have the time or the money, we try to wait until we do, and then undertake the job properly. This is not always possible of course. We try to follow the principle and in the long run spend less time on the job, giving us more time for other things and spending less time trying to keep makeshift equipment doing its job after it has failed.



Before building this hayshed we sought out technical specifications from the CSIRO. By burying the posts deep enough in the ground (6 ft suited our soil and type of posts) we were able to eliminate diagonal braces and prevent the building leaning. We hired a post-hole digger from an SEC contractor to dig them, and a mobile crane to drop the poles in. Both jobs were of short duration so hire charges were at a minimum.

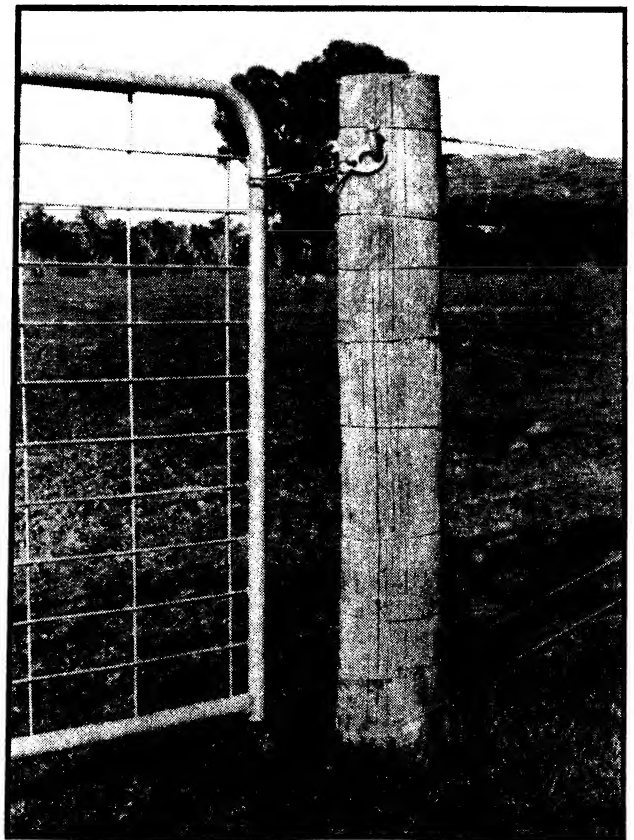
Tools are required for most jobs, and here again it is worthwhile to buy good tools. Our first chainsaw was a cheapie. In no time at all it became hard to start. Not long after this it was rebored. This brought about a temporary improvement, but it was not long before it again gave trouble. The next chainsaw cost twice the price but it has given years of trouble-free service and has worn out three chains with hard work. Other parts would have cost less than \$40.

Our first electric drill was a 9 mm ($\frac{3}{8}$ in) model of a well known brand, on 'special'. It was asked to do much heavier work than it was designed for and was worn out and burnt out after a few years. A heavy-duty 12 mm ($\frac{1}{2}$ in) drill at three times the price is also being given a hard time but seems to be taking the abuse. Some cheap tools can not only be unsatisfactory, but also dangerous to the operator.

Cheaper materials may not result in long-term savings, either. Some treated-pine fencing materials available locally have been shown over the years to be unsatisfactory. Horizontal rails have sagged, as their diameter has been insufficient, and they have broken. Strainer posts 15-20 cm (6-8 in) in diameter pull through the ground even when sunk a metre (40 in) deep, and with a bed log buried in front. The clay is soupy in winter and in summer it cracks open. Thus over the years the gateway becomes wider, and in time the chain that holds the gate closed is not long enough and needs to be extended. The wires of the fence become loose because of the post's movement. In this case standard recommendations were followed, but they did not suit our soil. Larger diameter treated-pine posts are usually unobtainable so we have resorted to hardwood strainer posts. They are heavier and larger than the pine posts. We now attach the gates so that they close against the post rather than swing through the opening. This way if the post does move, the chain does not need to be extended and a large gap does not develop between the gate and the post.

Making your own equipment can be very interesting, but if you want the equipment to be reliable, the purchased product

is usually the best bet by far. In most cases it is fair to say that if a product has been on the market for a few years, most of the bugs will have been ironed out. For example, if a person wants to make his own windmill I would say go ahead. But if what is really required is a reliable source of water pumped by the wind then I would advocate a commercial product. It is much more likely to have a long and trouble-free life, without



Although this gate and gate post were put in according to recommendations, the post moved in the ground and the gap you can see developed.

requiring constant repairs and modifications. The installation is something that the inexperienced person can do himself, but would probably be better done by the expert, and possibly cheaper in the long run.

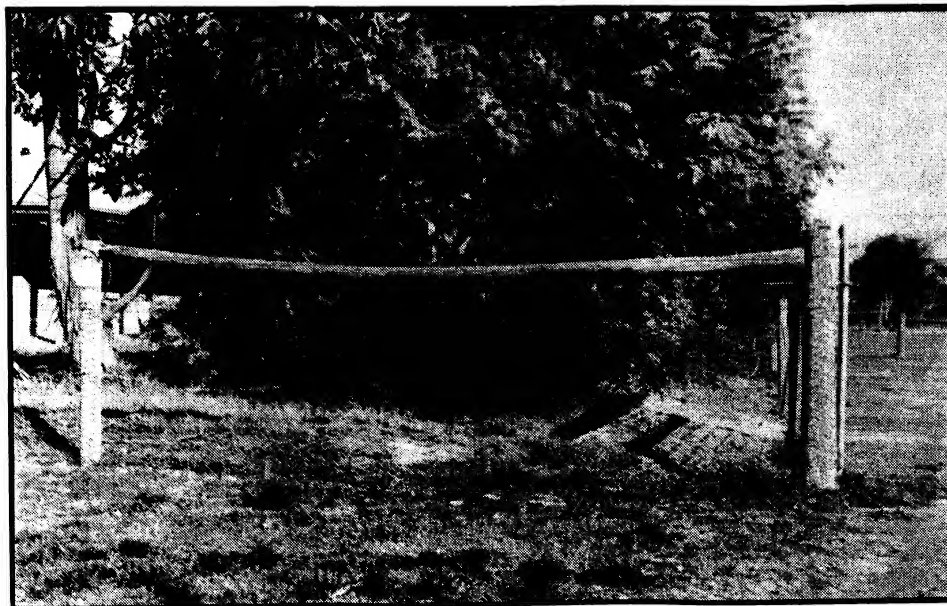
On the subject of windmills, many people like the idea of using a Savonius rotor made from 44-gallon drums to generate electricity. A bit of reading on the subject suggests that the design is not really suitable. In this area I would be guided by the experience and expertise of others.

In the alternative-technology or self-sufficiency situation, in many cases the off-the-shelf product will not be suitable.

Frequently I have found that when I want a particular article, because it is not in stock the salesman will tell me that it is not really required (although I know perfectly well it is), and may even suggest that the item is not available. I have also had the experience of asking for an item, acknowledging that it costs more, and stating that I am prepared to wait until it comes in, yet the firm will not order it. In these situations you need the help of experienced people, and this is where *Grass Roots* comes in. There is a wealth of experience among the readers and advertisers. Make use of it, and don't try to be completely self-sufficient too soon. It is often very costly.



The same gate as pictured on p. 43. We have changed to larger posts and now have the gate closing against the post, not through the gap. The larger sized gate posts may still move, but it will not be critical.



Above is an example of a cheap product that has turned out more expensive in the long run. At the time of construction, this strainer rail was all that was available. Because the diameter of the rail is too small, the rail has sagged under its own weight and the left-hand end has split. Ultimately it will have to be replaced.

MAKE A CHILD'S TIPI

by Kerrie Hamilton, NSW.



This is a simplified tipi which makes an ideal cubby for kids.

Sew a 3-m (10-ft) length of heavy-duty calico horizontally to a 2.5-m (8-ft) length. Mark the centre, Mark a semicircle with a radius of 1.5 m (5 ft) as shown in Fig. 2, and cut out. In order to leave a hole at the top of the tipi for the poles to protrude through, make a number of cuts at point A (Fig. 2). The length of the cuts will determine the size of the hole and will therefore depend on the thickness of the poles you use.

Fold the segments under and secure with four rows of stitching (Fig. 3). This reinforcement is needed to prevent tearing. Now hem all around the tipi. Fold down the centreline and sew the sides together for about 45 cm (20 in) to prevent tearing. Now hem all around the tipi. Fold down the centreline and sew the sides together for about 45 cm (20 in) (Fig. 4.) Short strips of canvas tape can be sewn on to provide a means of closing the doorway, as shown in the photograph.

For the poles I used six tomato stakes, drilled and threaded with strong rope. I knotted on either side of each stake (loosely — there must be enough room to move the stakes). The cover goes on when the stakes are upright, and then they are spread out. This is a quick and *cheap* cubby for kids without trees, and it requires minimal effort to put up.

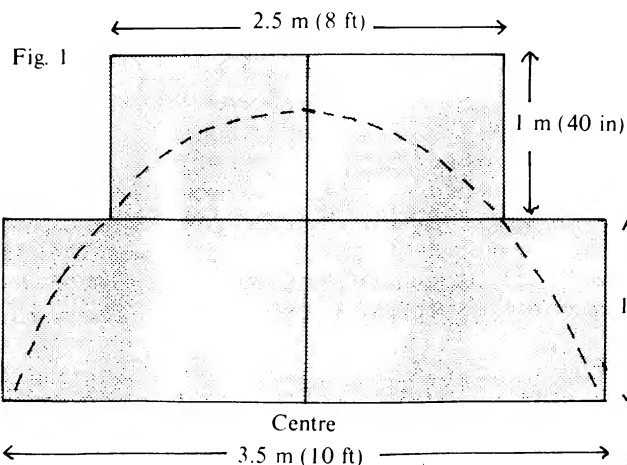


Fig. 2

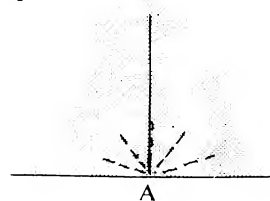


Fig. 4

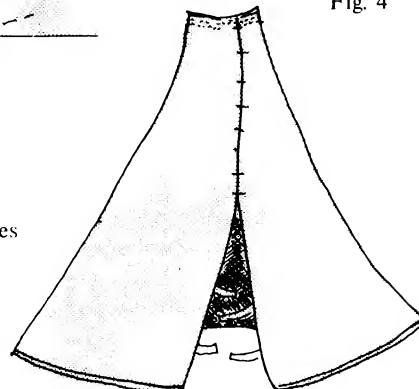
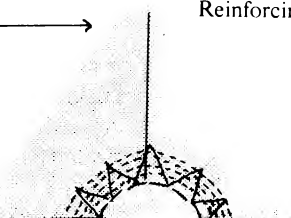


Fig. 3



Natural Goat Care

by Pat Coleby, Harcourt, Victoria.

In GR No. 32 someone wrote asking if there was a substitute for tick serum. Vitamin C works equally well against bites of ticks, snakes or spiders. A few years ago a friend of mine was off to Queensland holidaying, taking the corgi with her; I suggested she take a supply of vitamin C with her just for emergencies. It saved the dog's life. Apparently it was bitten (if that is the right word) by a tick, and they did not find it until it was in a coma; the vet, on being consulted, said it was too late. So remembering the vitamin C, which was only oral powder, not an injectable one, they dissolved some, and dribbled it carefully down the dog's throat. It recovered in a fairly short time. I believe they gave it about a teaspoon (5 g) every half hour in small doses. The advantage of this method is that the animal, be it dog or goat or whatever, will gain immunity to the tick poison gradually, as vitamin C does not affect the immune system as other things can. It is always worth a try to use this remarkable substance in cases of poisoning of any sort, or other unexplained trauma; it has astonishing effects, and can do no harm.

I have had a great many enquiries about worming goats lately. I do feel that worm drenches are not the answer; it is much more effective, and much cheaper, to build up soil health to the point where the worms cease to be a problem. It also helps to keep goats in optimum health by making sure they receive the full range of minerals and vitamins, particularly vitamin A. This seems to give them the ability to cope with worms; they definitely build up a resistance to them when in full health. On the few occasions when I have had worm counts done on my goats, the counts have been in the low hundreds, which is an acceptable norm. In fact if I do get a worm count of nil I wonder what is wrong, as I believe, with David Mackenzie, that they are meant to carry a few. No worms, and I suspect something worse!

A friend of mine has her goats on a very restricted area, and had had worm problems of startling proportions over the years; having tried ringing the changes in drenches, which only made things worse, she asked me if I had any bright ideas. I suggested dung beetles. These small (about 8 mm long) bronze beetles are miracle workers given a chance. But they can work only in certain conditions:

- (1) they do not like acid soils — a pH of lower than 5 is, I think, too acid for them, and between 5 and 7 is preferable;
- (2) for this reason, they do not like superphosphate, which makes the soil acid;
- (3) they cannot operate in totally dry conditions (in a drought they seem to go into hibernation, and I find collections of them under logs etc.).

So my friend set to work: she collected all the old bedding out of the goat houses and chook houses, and any compostable rubbish she could find, and spread it over her small paddock. I can hear voices saying, 'What a great way to spread worms,' but strangely enough, it does not have this effect. The next thing is to pray for rain, or for a stroke of luck like the one my friend had when a water main burst up the road and spread 33,000 gallons over her paddock, making it into a quagmire

for a day or two! I suggested that she spread some dolomite on this mess, about three bags on an acre; meanwhile the goats were handfed hay. Within a week, a remarkable metamorphosis began to take place. Green sprouted from everywhere, and in places the ground appeared to be in perpetual motion; on lifting up a forkful, dozens of extremely active dung beetles were to be seen. That paddock has never looked back, the goats look better than they ever have, and my friend is using less drench than she ever has before.

I realise that we cannot all lay on burst water mains, but if you systematically spread the bedding from your goat sheds over the paddocks, starting at one end of the field and working in rows across the other, it is bound to rain sometime we hope, and eventually you will find that worms will cease to be a problem on your place. If you are not sure about the pH, study the weeds that are growing: sorrell, capeweed, onion grass, a general sort of pinky tinge to the paddock when viewed from the distance — all these mean sour soil, and up to half a ton of dolomite to the acre will also make a great difference.

The first time I heard about dung beetles liking nicely balanced ground and had spread dolomite on a paddock I had an interesting experience, which I would not have believed if I had not seen it. I had put up a rail to tie the horses; on this day two of them were being shod and had been tied in turn in the same place. The ground was just completely bare earth. After the shoeing there was a nice mountain of dung, but as it was time to fetch the kids from school, I left it to pick up later for the garden. It was not until after tea three hours later that I remembered it, grabbed the fork and barrow and went out. Instead of the nice pile about a foot in diameter that I expected, there was a large flat patch of manure, a yard across, absolutely seething with dung beetles. By next morning it had all gone, and it was high summer. So they work pretty fast, given conditions that they like.

To return to the worm problem when you *have* got one. My rule is never to drench unless I know it is needed: a scouring, bloated (bloat is nearly always helped on by worms) or depressed-looking beast with runny eyes means that something has to be done. It is also routine practice to drench at kidding time, although nowadays I do not always do so. I use Thibenzole powder, giving the goat a dessertspoon straight into the mouth, in powder form, because in this way it does not bypass the first stomach as so many liquids do, thereby leaving the worms in residence there. Thibenzole is 99% safe, and can be used in double doses or two days running without ill effect. Of course, in the case of a milking goat, milk must not be used for human consumption for 48 hours.

With some worms, Brown Stomach Worm in particular, it may be necessary to drench two days running, as the ones buried in the stomach wall do not come out until those in the stomach have been moved by the first day's drench. With Barber's Pole Worm, the signs of which are anaemia and sudden collapse on the first hot day after a long cold spell (which is when the worm goes into action), Thibenzole will

work very well, but unlike nearly all the usual worms Barber's Pole Worm has a 14 day life cycle, so a drench 14 days later, not 21, will be needed in this case.

Sometimes, after feeding goats hay which has been scraped off the ground, as happens with pea or lupin hay, the eggs of pinworms are scraped up too, especially if sheep have been on the paddock. Ordinary drenches make no difference to them, I have found; it is necessary to use a Piperazine drench, which like Thibenzole is very safe. Suspect a goat who is wagging her tail for no particular reason — closer examination will quite often reveal several of these little worms wriggling around the anus, just as they do in humans.

As I mentioned earlier, another preventative against worms is to make sure that your beasts do not become deficient in vitamin A, because worms apparently thrive when this is so. Regular injections of vitamins A, D and E, or regular dosing with Vetemul, or if you cannot get anything else cod-liver oil, should take care of this. This is especially necessary when green feed is in short supply, as in a drought, or a cold wet winter when the animals are confined to their houses.



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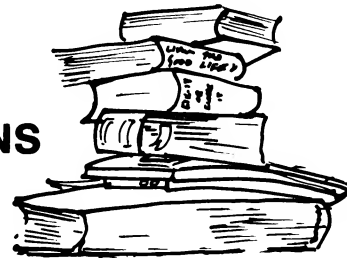
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PENPAL PAGE

I am a born again Christian, a non-smoker and practically a non drinker (a rare one) and I am coming 21. I would appreciate anybody who lives out in that big vast world to write to me as I wish to have GR readers as penfriends (male or female) with similar interests and aged around 20-30. I am 5 ft 7 in, medium build and I am interested in becoming self-sufficient. I also like knitting, sewing, reading, listening and playing music (learning piano), fishing, needing help to become a health fanatic and I have many other interests as you will find out if you write. Share your interests and self-sufficiency plans and experiences with me please.

Gwen Walding, Box 654, WAIKERIE 5330.

I would like a penfriend similar to my age. I have a horse and many rabbits. I will write to anyone who writes to me I am 12. I like skating, art, poetry, swimming and letter writing.

Yvonne Wilson, Camerons Ln, BEVERIDGE 3653.

I live in NSW. I have a dog, two brothers and a sister. I'm interested in self-sufficiency. I would like a penfriend with the same interests. I am nine.

Shara Popple, Kingdon Drive, COOLAMON 2701.

I am 12 years old and live in Brisbane. I would like a penpal from any state. I love animals and country life. I will answer all letters, male or female.

Libby Dodd, 80 Pring Street, TARRAGINDI 4121.

I am 6 years old and would like a penpal from any state. My hobbies are stamp collecting, cricket, swimming, writing letters, cooking, camping, fishing and many more. I would rather my penfriend be a boy.

Adam Lockyer, Wormboo Street, RAVENSHOE 4872. Ph: 976251.

I'm 12 years old and I would like a penpal who is a horse owner. My hobbies are anything to do with horses - riding, showing, etc. I have two horses, a quarter horse and part Arab. I will answer any letters.

Vanessa Robins, Lot 3, Ridgehaven Road, SILVERDALE 2750.

I am 10 years old and would like a penfriend from anywhere. I have a brother whos is six and a sister who is eleven. We have about 14 chooks and a cat, dog and a kangaroo. I don't live on a farm but on the outskirts of town and enjoy reading very much.

Jessica Coupe, Box 1049, GERALDTON 6630.

I live on a large suburban block and we have six chickens, a dog and a canary and grow many different herbs and natives. I love animals and plants. I am 12 and would like a penpal of either sex of around the same age, from anywhere except Vict., NSW, or Qld.

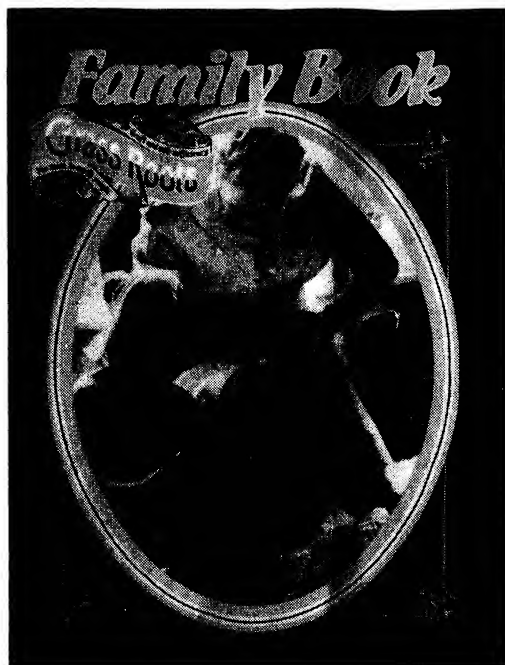
Sally Collyer, 1 Shirley Crt., CROYDON 3136.

p I am 11 years old and I would like a penfriend any age. I live on a farm with some animals. We have 3 sheep, 14 Angora goats, 6 ducklings, 5 ducks, 1 dog and 1 cat. I am in grade 7. I like reading and I love dogs. I will write back to whoever writes to me.

David Manning, Oakley Road, McLAREN FLAT 5171.

I am 10 years old and live on a farm in Ocean View, Dayboro, in Queensland. I will be in Grade 6 in 1983. My main hobbies are: reading, camping, organic gardening, cooking, disco dancing and collecting stamps and shells. I have a pet cat Siamese female, Dyani, and I breed bantams and guinea-pigs. I like reading *Grass Roots*. I hope I can get a penpal my age (10), preferably a girl.

Aylwen Creevy, 'Four Winds', Ocean View, MS 330, via DAYBORO 4521.



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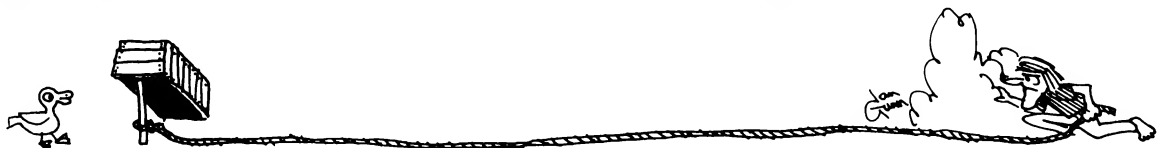
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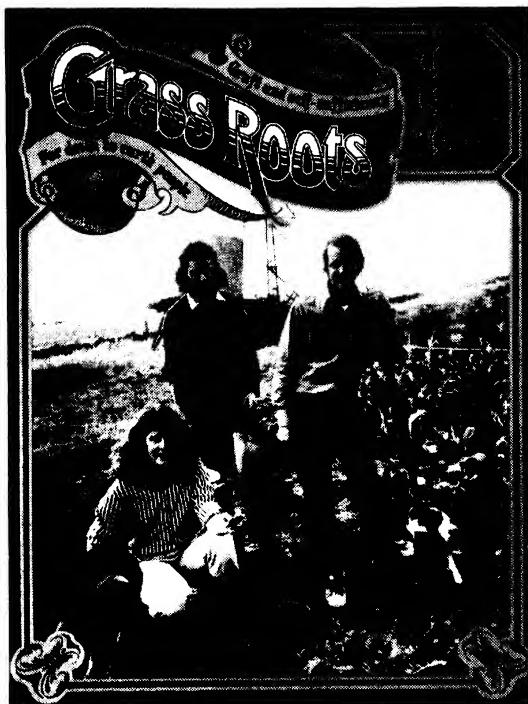
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THE EARLY YEARS

Grass Roots, craft and self-sufficiency magazine, was first published in 1973. Since that time, readers from all over the country have been sharing their enthusiasm for a more independent lifestyle and passing on the skills and know-how needed to achieve it.

This book is a reprint, by popular demand, of the first five issues of Grass Roots which have been out of print for some time. In its pages will be found an amazingly thorough collection of hard-to-find information from making sleeping bags, insect sprays or dandelion wine to training a horse to pull a jinker, knitting straight from the fleece or raising an orphan lamb. As well, because the information is from the very first issues of Grass Roots, the book contains very basic recipes and instructions for making bread, butter, cheese, yoghurt and even sandals, flutes, and wattle and daub buildings.

Although *The Early Years* is an extremely useful reference, it is more. The warm, companionable feelings of those folk trying, failing, trying again and finally succeeding shine through its pages providing the stimulation needed to make your own personal choice of lifestyle a success.

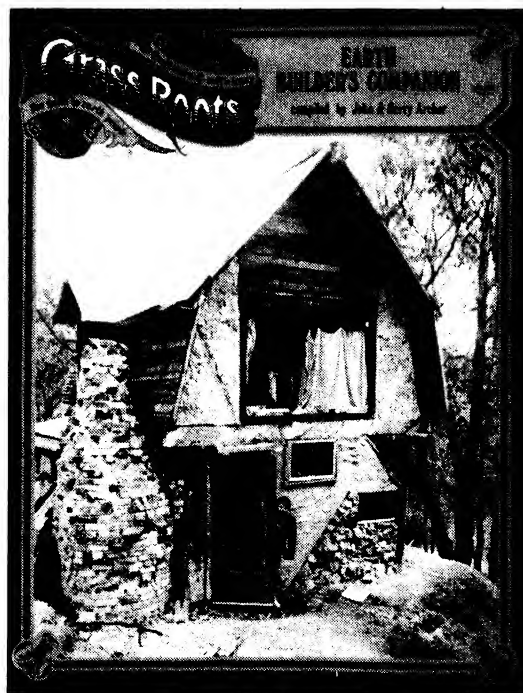
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OLD HOME ORCHARD COMES ALIVE

by John, Melbourne.

My last two articles, in GR Nos. 29 and 30, explained the basic principles of budding and grafting and described the most commonly used methods. The article in No. 29 (*Budding and Grafting the Easy Way*) also included a reference list giving the various kinds of fruit that may be used on the different rootstocks.

Professional nurserymen use various propagating methods as part of their routine operations, but fruitgrowers may decide to graft over (or rework) a stand of fruit trees of a variety that has lost its popularity on the market.

The same methods could be used by anyone living on the land who wants to retain the few existing fruit trees around the house and use them as the basis of a small orchard providing fruit to the occupier and family.

Let us take an example: a small property with six fruit trees, some older than the others, but all — as shown by dead branches, shoots growing across each other, dried or diseased fruit from the last year's crop still hanging on the trees, and the knee-high weeds growing halfway up the trunk — in a state of neglect. Could these trees be transformed to make the basis of an orchard? That depends on many things.

First we have to decide whether the existing trees are worth retaining or not. If several of the branches are dead, or dying, or if the 'collar' of the tree (the trunk at ground level) shows extensive rotting under the bark, then it is doubtful whether it would be worthwhile to attempt to save the tree. Such trees are best removed; it is important to carefully dig up and burn all the thicker roots, because collar and root rots spread by pieces of root and the soil. It is preferable not to plant another tree in the same situation, but if we want to use the same site, it should be fumigated before replanting.

Even if trees show no outward signs of the detrimental effects of pests or diseases, it may be reasonable to replace them if they are aged or badly neglected. It may be possible to plant a young tree of the same variety now and to retain the old tree for a few years, until the replacement starts to bear.

Our attitude will also be influenced by the usual lifespan of the tree. On average, apples could produce satisfactory

crops for 40 or 50 years, and pears up to 80 or a 100 years. The lifespan of most stone fruit, including almonds, seldom extends beyond 20 or 25 years; plums, however, may crop for twice as long. In suitable situations citrus may crop almost as long as pears and chestnuts and walnuts even longer.

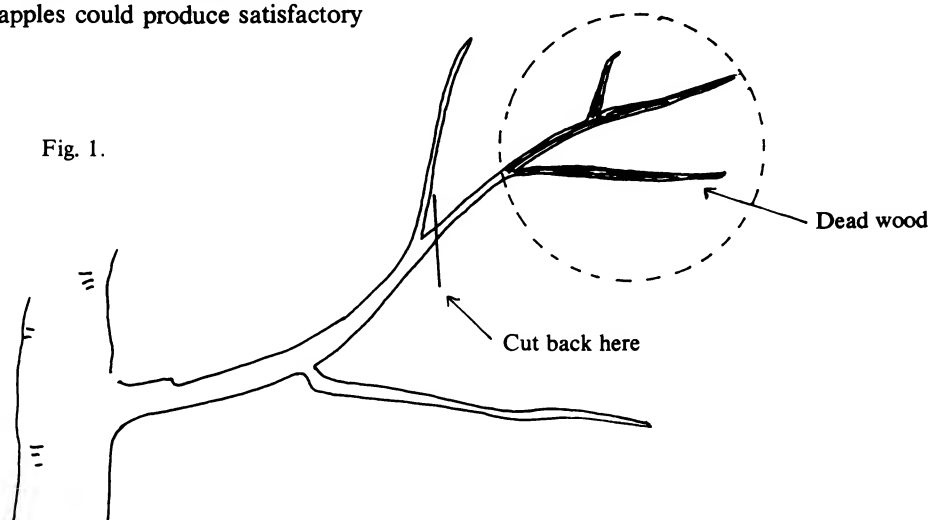
In most cases, then, it would not be worthwhile to persist with old apricot or peach trees. It would be far more satisfactory to plant another young tree of the same type, but an improved variety. The situation may be different with cherries or plums. If we have only one tree of each, or if the varieties we have are not suitable for cross-pollinating each other, it may be worthwhile to graft some scion shoots of a suitable polliniser into our tree. The same thing applies to apples and pears, but with these and with citrus reworking of a part or the whole tree may also be considered.

If we want to introduce a polliniser variety as part of an existing tree, we can use cleft graft or whip-tongue graft. For cleft graft, in winter or early spring, we may prune back one to three branches evenly distributed around the tree to a position where the branch diameter is at least 6 cm (2½ in) and we insert two scion shoots each as described in the article *Grafting of Fruit Trees* (GR No. 30). Alternatively, we graft several young shoots all around the tree, using the whip-tongue method.

We may use the same methods for reworking. We could rework the tree entirely to another variety, but we could retain the existing variety on a part of the tree and rework the rest to one or more other varieties. If we use the whip-tongue method, a large amount of scion wood would have to be used and the operation may be very time consuming. On the other hand, by this method the tree could be fully bearing again within two or three years. If the branches are cut back to a thickness where cleft grafts may be used, fewer grafts will be necessary and grafting will take less time, but it will take longer for the tree to yield full crops.

When reworking large, old trees, it is possible to cut them back very hard, leaving only sections of the main branches

Fig. 1.



40-50 cm (16-20 in) long. Then we let the dormant buds of the branches develop shoots and bud or graft these shoots during the next growing season. This method is described in the article *Budding and Grafting the Easy Way* (GR No. 29).

Now let us go back to our six old fruit trees again. Let us suppose that we take over this small property during February. As a first measure we slash off the weeds between the trees. Around each tree we clear all weed growth over a circular area about 1 m in diameter. Then we give each tree a generous watering.

Our small orchard consists of one tree each of apple, pear, cherry and plum, and two peach trees. As there have been no other fruit trees planted in the neighbourhood, and the apple, pear, cherry and plum would have needed another variety for cross-pollination, the original orchard probably consisted of more trees. Apart from one of the peach trees that has several dead or dying branches, the health of the other trees seems reasonable.

We are unable to find out the names of the varieties from the previous owner. We are not impressed by the green, nondescript apples. The pear looks like a Packham, the plum is a blood plum, the cherry tree has no fruit on it; it must have ripened before Christmas, well before we took over.

Our intention is not to plant more trees, but rather to restore the health and vigour of the existing ones. So during the next winter we cut out all dead branches, by making a cut just beyond the bud, in the healthy part of the tree (see diagram), collect all fruit left on, or under the tree and all fallen leaves and burn all the dead branches, fruit and leaves. We spray the stone-fruit trees (cherry, peach, plum) with Bordeaux mixture at the beginning of leaf fall against fungus diseases. We spray all trees with a winter (dormant) oil against mites and scale insects in July and with a Bordeaux spray when the buds start to swell in August.

We start the pruning with the two peach trees in June. Apart from removing the dead branches, we also cut branches crossing over other branches, cut out some of the lateral (side) shoots growing from the branches, and shorten the remaining ones by about one third.

Moving on to the other trees, we first remove the dead and crossing-over branches. Then we prepare the trees for reworking. We decide to rework about a quarter of the pear and the plum tree using scion wood of a variety that is a polliniser for the Packham pear (Josephine, Winter Nelis) and the late blood plum (Narrabeen). We want to rework about two thirds of the cherry tree with an early and medium cherry variety — hoping that the original variety may cross-pollinate with one or the other. After the next season we could make a decision about keeping this original variety or not.

With the cherry and plum we will employ the budding technique during the next summer. On the pears we will use whip-tongue grafts.

We decide to rework our apple tree entirely. We cut back the tree hard, as described above, then during the spring we use Jonathan and Granny Smith scion wood for whip-tongue grafting.

I shall follow the progress of the house orchard in future articles.

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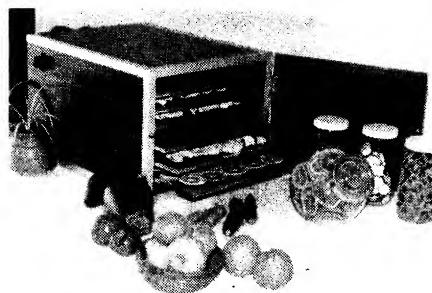
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THE TRUE ADVENTURE PLAYGROUND

by John Mason, Lilydale, Vic.



There is a great misunderstanding in Australia about the meaning of the term 'adventure playground'. That is why I have chosen to prefix the term with the word 'true' in the title.

Adventure playground is a term coined by a Danish architect during World War II to describe playgrounds he had created where children could create and build under the supervision of an adult. In essence, he envisaged these playgrounds being built onto bomb sites or rubbish tips. As the adventure playground developed and spread to other countries after the war it came to mean a supervised area where children did such things as build cubbies, grow vegetables, keep animals, light and cook on fires, play with water, flying foxes etc.

Here is one description of the object of an adventure playground, from the pamphlet, *What is an Adventure Playground?* by the National Playing Fields Association (UK).

[An adventure playground's] primary aim is to provide a supervised play area with materials and equipment in an environment that will help stimulate the imagination. The adventure playground should present an opportunity for children to play in a 'permissive' and 'protected' atmosphere which includes opportunities for experiment and adventure.

This is how the adventure playground is seen in other parts of the world. In an age where we are standardising with the rest of the world in so many ways (metrication etc), we are well overdue to get our playground terminology straight.

There is a small number of true adventure playgrounds operating in Australia at the moment, but not many compared with Europe. It needs to be recognised that this type of playground caters for something quite different from the

prefabricated equipment playground. They are not alternatives! The value of prefabricated play equipment is limited. It provides a thrill, a high point in the child's routine, but generally speaking it will excite and entertain children only if they are exposed to it very occasionally (there are some exceptions). When providing a play facility which is intended for day-to-day use a different approach should be taken. Designers can often achieve the greatest insight simply by reflecting upon their own childhood.

What I see as routine play or day-to-day play is characterised by such things as:

Social Interaction: doing things with other children, sharing experiences, cooperating in some activity or project together. This might involve anything from simply talking together to playing a game or sport together.

Role Playing: pretending to be someone or something else, whether a historical role (Robin Hood, cowboys etc.) or a contemporary one (mothers and fathers, firemen, cops and robbers etc.).

Creative Play: making something — a cubby, a sword, perfume etc. This creative play is usually just another dimension of role playing.

In addition to the three aspects mentioned above, motor-skill development is another very important aspect of play. This comes automatically through play directed towards the other aspects. By lifting timber to build a cubby, children develop muscle strength and handling skills. Very rarely do children climb and swing on prefabricated structures all day, but if climbing and swinging becomes part of playing Robin

Hood, they may practise them all day, thereby developing motor skills.

A true adventure playground does cater for children's day-to-day play and is probably the ultimate for a neighbourhood or school playground. The biggest obstacle to establishing a network of this type of playground in Australia is the need to change social opinion. Australian society simply is not accustomed to the idea of areas which look untidy, seem to be unsafe and need an expenditure on leadership. Community attitudes need to change. I have found in my experience that it is a waste of time persisting with any project which does not have the full and enthusiastic support of both the community and the bureaucrats.

Between the true adventure playground and the prefabricated equipment playground there are many alternative possibilities which cater to the routine type of play more than prefabricated equipment, though not as well as the adventure playground. Perhaps the best way of all to provide adventure playgrounds is to make a gradual transition from one type of playground to another.

Above all, when providing for children's play let us always keep the children foremost in mind. If the playground doesn't cater to the children, why build it anyway?



Playgrounds like this may not look aesthetically pleasing to the adult, however, they offer challenge and stimulation to many children.

PLAYGROUND EQUIPMENT FROM RECYCLED MATERIALS

by Jim Maxlow, Glen Forrest, WA.

When we think of playground equipment we tend automatically to reflect on those stark galvanised-pipe monstrosities that squeak, rattle and roll in the middle of parks and school yards. Since the introduction of treated pine some years ago we have at last seen some imaginative variations on the run-of-the-mill monkey bars, swings and seesaws.

As a full-time househusband I have been attending various playgroups regularly for two years now. The playgroup we have settled on is unique in that children of all ages, from newly born to preschool age, are able to attend, and since all parents stay with their children there is always a happy cooperative atmosphere.

In setting up the playground we were faced with the problem, which is still with us, of how to entertain safely such a wide range of children in the playground. Obviously what is stimulating and safe for a four-year-old can be very dangerous for, say, an 18-month-old toddler, and equally, what is good for the toddler is of no interest to the four-year-old. With this in mind we set about studying the needs and patterns of play of the various age groups involved. We searched out books on the design and construction of playground equipment, but immediately it became obvious that the elaborate equipment portrayed, designed and built by well-meaning parents, all catered for kids of primary-school age and older. Our toddlers were having enough trouble standing up, let alone tackling elaborate forts, rope ladders and flying foxes. Local playgrounds were no help either. The equipment was basically too big for our kids and in many cases built with very little thought

to the needs or capabilities of the users.

So, we needed scaled-down equipment which would be robust enough for older children yet safe for toddlers. We needed a graduated range of structures to ensure that as the children became older, they would not become bored, but simply progress to more complex equipment. We needed to incorporate subtly items such as ladders, slides, jumps, cubbies, tunnels, water and climbing; these would develop the children's confidence in motor control, yet still be within each child's stage of physical development.

Very young children need to learn how to play, so rather than rely on their ability to invent games in the way that older children can, we designed the structures to incorporate many alternatives — different ways of tackling the structure and different ways of getting away. These again can be graduated to keep the children developing as they grow older.

As a non-profit group, we naturally settled on using recycled materials to build the equipment. Not only are the materials cheap or even free, but they also serve to introduce the kids to the material world outside.

Car, truck and tractor tyres are easily procured and can be used as tyre swings, set in the ground to form tunnels and simple objects for climbing or sliding, incorporated into climbing frames, and when filled with sand can make great tyre mountains. The larger tractor tyres can be filled with sand and jumped into, and also make good sandpits when part of the rim is cut off.

Logs are useful as retainers for large sandpits and if large

enough double up as stepping logs. Large tree roots, suitably trimmed, encourage climbing and also form vantage points.

Steel drums, brightly painted, are useful incorporated in climbing structures. The children are small enough to climb through or into them, and quite often relish the enclosed feeling which inspires singing or quiet contemplation. Toddlers love to crawl through drums or pipes, so special areas of single items can be set aside for them. Later they can graduate to the larger equipment. When cutting the lids off drums it is advisable to leave a 2 cm rim all around to strengthen the drum, grinding or filing down all sharp edges as you go of course.

Telecom cable reels come in all sizes and form an interesting structure when butted close together in increasing sizes. The sides of the reels form large platforms, and kids can step from one to another with confidence. The sides of the larger reels can be enclosed to create interesting tunnels, and the central cores can be opened up to form good-sized cubby holes. Care should be taken to ensure that the children's feet cannot get caught in the central axle hole. These cable reel platforms make ideal bases for slides, jumps and ladders, and when brightly painted form a focal point for all age groups.

Secondhand timber forms the basis of most of the structures, ladders and platforms. We deliberately cut the timber to different lengths: this helps to develop the children's sense of perspective by forcing them to look rather than to anticipate and also develops motor control by varying their grasp. All timbers should be proportioned to suit the smaller limbs, grasp and step of children, and splintered edges must be suitably chamfered. Any bolts should also be cut off flush and deburred.

Soil fill can be used by the truckload to form mountains, preferably in pairs so that the children can develop their momentum skills by running down one mountain and up the other. As mentioned earlier, tyres can be incorporated. These form steps and random stepping points. Large pipes can also be incorporated to form tunnels, and long logs to form bridges.

Sandpits are very important to children, but make sure they are large enough to allow vigorous excavating, play cooking, road building, dabbling and the antics of the ever-present happy-go-lucky child who loves to jump on everybody's sandcastles. To minimise injuries, sand can be spread liberally around and in and under all the structures.

Obviously the possibilities are endless, depending on what material is available; discarded wooden crates, boats, car bodies (with discretion), pipes, steel infrastructures and so on can all be put to imaginative use.

In my opinion it is of prime importance to construct on a scale small enough to suit the children. Each structure should be multifunctional, i.e. with built-in alternatives of approach and escape, and when a number of structures are built they should be integrated in such a way that one structure is an extension of another.

HANDY HINT

To clean furniture before polishing or waxing, add 3 tablespoons linseed oil and 2 tablespoons turpentine to 1 litre of boiling water. Let cool before bottling.



Happy cooperative children plan on a simple merry-go-round made out of a recycled cable reel.



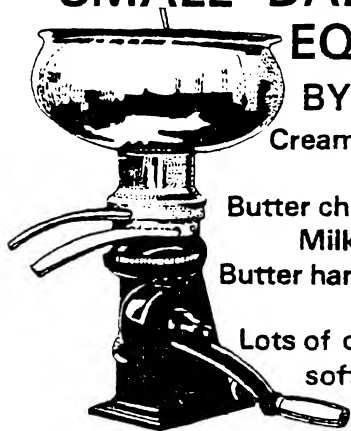
Car, truck and tractor tyres can be incorporated into the playground in a variety of ways – from a simple home-made tyre swing (GR No. 13 p. 5) to a tractor tyre pit or stepping points, as illustrated in this photo.

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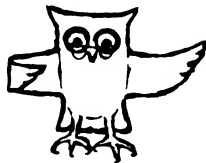
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For over 275 years, Twinings of London have been supplying a range of quality teas. *Grass Roots General Store* has for sale thirteen Twinings varieties, all available in 250 g tins, and some in 125 g packets and/or teabags.

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	250 g Tin	125 g Packet	Teabags
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Ceylon Breakfast	*		
China Black	*	*	
Darjeeling	*	*	*
Earl Grey	*	*	*
English Breakfast	*	*	*
Irish Breakfast	*	*	*
Jasmine	*	*	*
Lapsang Souchang	*		*
Lemon Scented	*	*	*
Orange Pekoe	*	*	*
Prince of Wales	*	*	*
Queen Mary	*		

Poetry

TO SARAH

*Sarah, oh Sarah, please put down your toys
Lay back in your bed and don't make a noise
There's something that I have to say
And it won't wait another day.*

*Today you were talking to the birds in the trees
You told them you loved them and you were only three
I'm sure that they listened for hour after hour
As you chatted with teddy on that back porch of ours*

*Sarah, oh Sarah, put your teddy bear down
Get back into bed and don't make a sound
There's something that I have to say
And it won't wait another day.*

*Soon you'll be growing to a fine looking lady
Where there's no time for magic and fairies are for babies
No Father Christmas and no reindeer belts
No golden angels and no magic spells*

*Sarah, oh Sarah, please try to be quiet
I've so much to tell you and no time to do it
There's something that I have to say
And it won't wait another day*

*I wish I could save you from growing up fast
To hide you from people who hide behind masks
And when naively you give all your love
It's returned to you fully as dearly it should*

*Sarah, oh Sarah, you're dead to the world
Now sleeping so soundly, you've not heard a word.*

Ed B.

LOVE IS MY REASON

*When I stroll with you
Love is my reason.
When I talk with you
Love is my reason.
When I feel the sky, the clouds
The trees, the flowers, the earth
Love is my reason.
When I touch the moon, the stars
All gifts from our God of love
Love is my reason.
When I am up, or when I am down
Crying or laughing, being a clown
Love is my reason.
When I walk the street
With the bitumen hot on my feet
Walk in the park
Sit in the shade of a tree.
Love is my reason.
When I think of all I do
Touch, feel or see
I know, Love is my reason.*

Joan Miles.

WHEEL OF LIFE

*Sometimes when I spin
I think
This is my life here;
Each revolution the hours and minutes
Of my days,
Spinning the thread of my life.
This is me, this thread,
So fine, so fragile;
Will it last? Or will it break
Beneath the tensions of time?
An now I ply;
This is you, this other thread,
Coarser, but strong —
So strong that time will never weaken it.
And so together,
Entwined forever,
We are woven into the intricate pattern
Of the Universe
Which God creates with his loving hand.*

Vivien Page.

THE OAK SEED

*I feel the light
I feel its warmth
Swelling, pulsating,
I erupt with life.
Bursting through my shell
My dormant soul awakes
And yawning
I take a deep breath of energy
And then stretch upwards,
Ever upwards,
Towards my destiny.*

Erica Korevaar.

NATURE'S REFLECTIONS

*Waterfalls gurgling,
A turmoil of sound.
Snowflakes descending,
A silence all round.
Small flowers blooming,
A symbol of love.
Morning's dew glistening,
A sign from above.
Large eagles soaring,
A need to be free.
Just nature's reflection,
Of life's meaning to me.*

Andrea Syme.

WATCHING

*Leaves that fall, clouds that rise,
Wind and thunder speak their minds.
Sea that moves for sun to rise,
Looking forward to peaceful times.*

B. Moore.

TO TREES, IN RAIN

*I love the misty trees in rainy weather
The blurred sage green against the pearly sky
The soft brown trunks of stringy barks and wattle
The gums of silver, white, and grey.*

*On rainy days the drought-dry grey of grass
Becomes a straw-gold yellow
Soft at last on the dogs' dry paws
And all the land turned mellow.*

*From the huge, cracked granite rock
The Moreton Bay towers dark and round and roomy
Sheltering a dry cave under her boughs
So mystical, magic, and gloomy.*

*And in rain, each green dark leaf
Shines like a polished green ruby.*

*When it rains, the trees have a rainy feast
Look, and see how they love it.
They don't run in saying, look, it's raining
But flatten their leaves to catch every drop
And their boughs sway lightly and slightly in harmony*

*The mighty trees have kept us warm and dry
By giving us wood when the wind was keen and high
So now in the rainy weather, I say thank you and bless you
Dear misty trees, as I watch you
Through our smoky window.*

Patti Trevor.

Kids Pages

Dear Grass Roots,

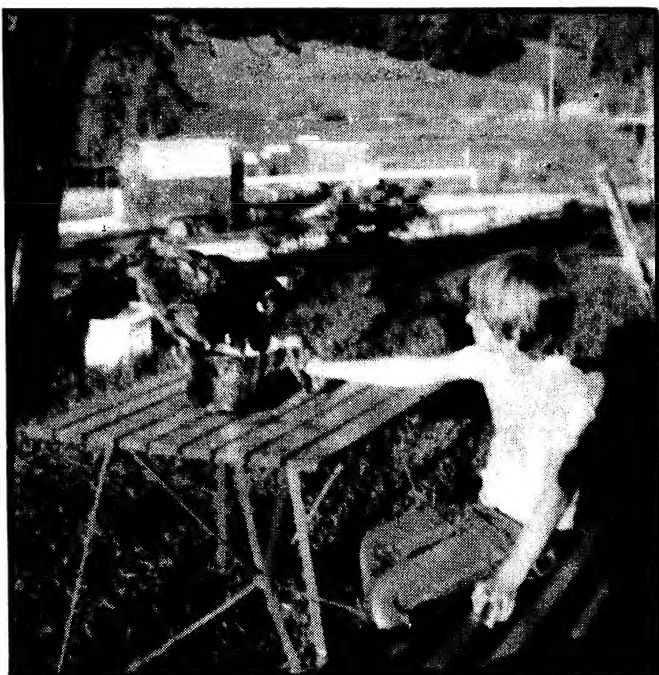
I am 10 years old and live on a farm. I have a sister and a brother. On our farm we have chooks, sheep, a dog and two cats called Mindy and Wiskers. I like the Kids Pages especially the recipes.

**Meredith Ambrose,
C/- Post Office,
BRACKNELL 7302.**

Dear Grass Roots,

I like the story about Snowy the lamb. It was in No. 33. We have a lamb called Snowy. She is a pet and follows us everywhere.

**Trina Rielly,
BOMBALA 2553.**



In the Kids Pages of Grass Roots No. 34, Tobi White of Forreston, SA, wrote in telling us all about his favourite pet hen Tiffany. In the photo above we have Adam, Tobi's brother with the famous Tiffany and behind her, Pecky. Both hens love their food and are almost hopping into the barley pot. Thanks Tobi for sharing your photo with us.

What do you call a strange object that falls into a chip pan?
An unidentified flying object



COOK'S CORNER

SPICE BALLS

- ½ cup softened butter
- ¼ cup honey
- ¾ cup sesame seeds
- ¾ cup sunflower seeds
- 1 tsp each nutmeg and cinnamon
- 2 cups wholemeal flour

- Grind the seeds in a blender, with a mortar and pestle or dice finely with a sharp knife.
- Blend butter and honey, add spices and ground seeds, and slowly add in the flour, a little at a time. Add sufficient flour to make a firm dough. Shape into small balls the size of a walnut. Place on a greased tray and bake at 150°C (300°F) for 12-15 minutes.

HOME-MADE GRANITA

To make several glassfuls you will need the following:

- a cup of juicy fruit – strawberries or raspberries, watermelon or cantelope chunks, well ripened peach or apricot.
- a tray of ice cubes.
- Crush the ice in a blender or if you do not have one, crush the cubes in a strong plastic bag with a rolling pin.
- Mash or blend fruit, pour over ice and stir gently.
- Yummy, drink up well.

THE NOISY MOTOR Gayle Holliday, aged 9.

*The noisy motor is so loud,
Rusty and dusty
Clusty and musty
Like a monster;
Roaring like mad!
Trying to move away
Someone is mad
From the noise.
Climbing the fence
Trying to get over
Reporting to the police;
The police come and turn it off.
Then all is peace again
Shh! Shh! Shh!*

FLIES Sunshine Miller, aged 8.

*Flies, flies, horrible flies,
irritating flies,
terrible flies,
flies everywhere.
Sticky, dirty FLIES!*

HOME-MADE CHIMES

by Dale Duggan.

You can make your own set of chimes by using tin lids, broken glass or foil bottle tops.

You will need — tin lids, glass or foil tops, string, a coat hanger or piece of dowel.

Lid Chimes

- * Pinch a small hole top and bottom of the lid.
- * Thread string through leaving 1-2 cm between each individual lid. It could be either a continuous thread per row or lids or individual ties between lids.
- * Tie the rows 3-4 cm apart onto a coat hanger or stick. Hang your chimes from the ceiling, a tree, or similar.

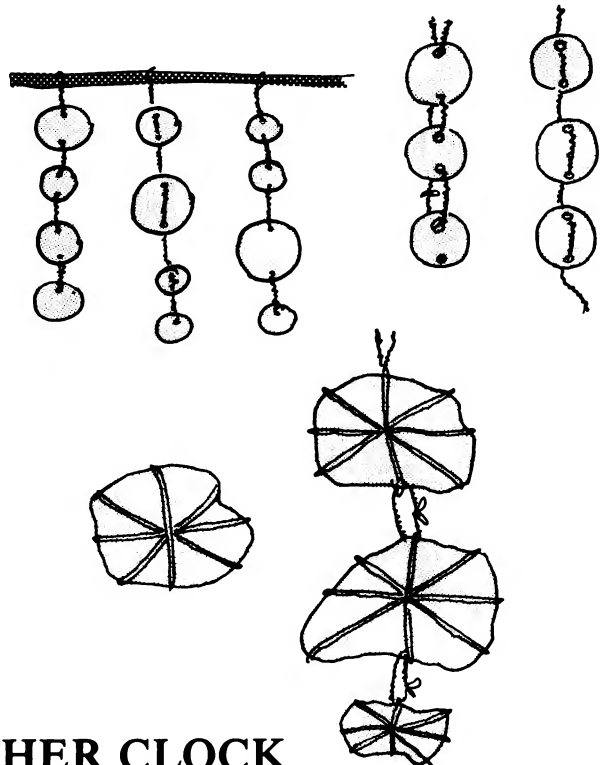
Glass Chimes

Pieces of broken glass (with the sharp edges sanded down) are ideal. Tie the glass pieces in a row by winding soft string around each individual piece.

- * Loop string between the glass pieces to form an individual tie, leaving 1-2 cm between the glass sections.
- * Hang rows from a stick or coat hanger and suspend as for other chimes.

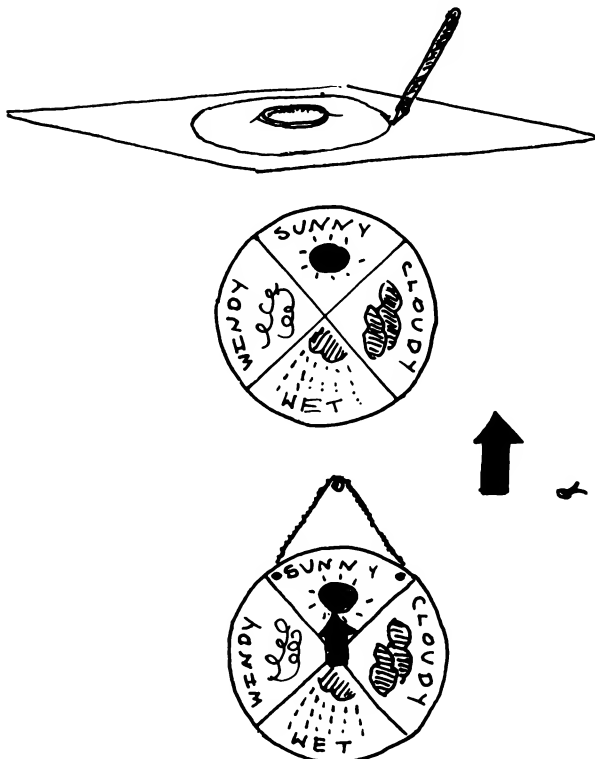
Foil Bottle Top Chimes

Make as for lid chimes.



MAKE A WEATHER CLOCK

You will need a piece of strong white cardboard, and a metal paper fastener.



- * Place a dinner plate on the cardboard and draw around it. Cut out. You now have a large circle.
- * Divide your circle into four (or more) and draw the lines with a black texta. Write in the words you are going to use, one in each section. For example, Sunny, Cloudy, Windy, Wet or whichever other ones you prefer. Draw a picture to describe each of them.
- * Finally, you will need to draw a single, thick arrow on a separate piece of cardboard and cut it out. Pierce a hole through the centre of the arrow with the sharp end of the scissors (carefully), and one through the centre of your weather clock. Attach the arrow with the paper fastener. If you would like to hang up your weather clock, carefully pierce two holes in the top section and thread a piece of cord through. Knot ends.

* * * * *

How do you keep a herd of elephants from charging?

Take away their credit cards.

While the Billy Boils.....

In fruits, grains, nuts, and vegetables are found the elements that are needed for growth, maintenance, and well-being of the human family. In addition to this are the delightful flavours, aromas, textures, and exquisite beauty; all this 'made especially for you.'

The Oats, Peas, Beans & Barley Cookbook.

QUICK HEALTH BREAD

- 4 cups plain W/M flour
- 1 cup wheat kibble or soy grits
- 1 cup skim milk powder
- 1 cup wheatgerm or ½ cup germ and ½ cup sesame seeds
- 1 tbsp oil (I use olive)
- 1 tsp salt

In a separate bowl mix 1½ tbsp dry compressed yeast, 1 tbsp honey and 1 cup warm water and the oil. Mix all the dry ingredients together. Make a well in the centre and pour in yeast mixture – mix in well from the outside in, add additional warm water to make a soft dough. Knead on a floured board until dough is elastic and all flour is mixed in. Return to a warm bowl and leave in a warm place covered for 10 min to prove. Return dough to floured board, punch down and knead again for about 3 min. Shape into loaves or rolls and place on well oiled tins or trays. Leave covered to rise for 40-50 min. Set oven to 240-260°C. Brush rolls with milk and top with sesame seeds or other. Bake loaves for 45 mins at this temperature, rolls about 15 min. Loaves are cooked if they sound hollow when tapped on the bottom.

SUPER SANDWICH FILLINGS

- grated apple, raisins or sultanas and cottage cheese
- mashed banana, chopped nuts and sultanas
- cream cheese, chopped walnuts and capsicum
- honey and tahini, currants and sliced apple
- alfalfa sprouts, tomato and capsicum
- grated beetroot, grated carrot, tomato and alfalfa sprouts
- grated cheese, tomato and finely chopped basil
- tomato, lettuce and fresh sliced mushrooms
- peanut butter, mashed banana and honey
- grated carrot, raisins and peanut butter
- grated carrot, grated apple and green pepper

S. McDonald, WA.



TOMATO AND NOODLES

Cook a potful of your favourite wholemeal noodles and set aside while you make the sauce. Slice a couple of onions and cook them in oil until golden brown. Use a deep frypan or shallow saucepan. Add at least four cups of chopped tomatoes, a handful of fresh basil, black pepper and a cup of tomato sauce. Cook over moderate heat until tomatoes are mushy and everything is well blended and fragrant with basil. Mix immediately with the noodles and serve with grated cheese.

Abigail Neville, NSW.

QUICK & EASY VEGETARIAN PIZZA

Saute chopped onion in butter and garlic. Add chopped basil and tomato paste to taste (fresh tomatoes in season). Heat a portion of Lebanese Bread in a hot oven for 5 minutes.

Spread onion/tomato base over the Lebanese Bread. Add chopped capsicums and sliced fresh mushrooms. Cover with a layer of grated carrot. Cover with a layer of grated cheese. Sprinkle with paprika.

Bake for 10 minutes at 450 ° F. When done, garnish with heaps of chopped parsley and chives.

Jade Stanton, NSW.

TAHINI

Tahini is a familiar sight in wholefood shops, and you often see it mentioned as an ingredient in recipes, especially for hummus, but not many people seem to know how to eat it alone. Straight from the jar, tahini is quite bitter, but can be made into a delicious spread by mixing with honey or molasses. However, the traditional Middle-Eastern way to eat tahini is 'cream' it with lemon juice, garlic and water. You need plenty of lemons! Into a bowl pour or spoon a quantity of tahini. Gradually stir in the juice of fresh lemons. The amount can be varied according to taste: perhaps start with ½ cup juice to every cup of tahini, although it is hard to overdo it. The tahini will become very thick and grainy. Now, very gradually, stir in cold water until the mixture assumes a lovely creamy texture. I like mine the consistency of thick yoghurt, to eat as a dip, but it can be thinned down further for use as a salad dressing. Squeeze copious amounts of garlic into the mixture, stir well, and garnish with paprika or parsley. Eaten with freshly baked flat bread, black olives and salad (especially tabbouleh), it is heaven! For an interesting variation, stir in good-quality natural yoghurt after creaming.

Stephen Jones, Nagambie.

VEGETABLE COCKTAIL

Blend at high speed 2 cups tomato juice, 1 small stalk celery with leaves, cut up, 2 or 3 sprigs parsley, 2 slices lemon, 1 slice green pepper, 1 slice onion and ½ tsp honey. Makes 3-4 servings.

PAW PAW CHUTNEY

- 1 kg chopped paw paw
- 1½ cups sugar
- 1 cup vinegar
- 250 g chopped onions
- 1 cup chopped dates
- Dash salt and pepper

Place chopped paw paw and onions in a saucepan, cook till soft, add other ingredients and cook 45-60 minutes. Very good with cold chicken and lamb on sandwiches.

Kate & Andy Thompson, Qld.

TOMATO SAUCE

- 2.5 kg (5 lb) ripe tomatoes
- 3 green peppers
- 1 tbsp salt
- 4 pieces whole ginger (bruised)
- 1 medium sized onion
- Juice of 6 lemons
- ¼ cup sugar
- 2 tsp whole cloves
- 1 small piece stick cinnamon

Peel tomatoes (an easy way is to pour boiling water over them) and remove the skins, chop the onion finely. Cut green pepper in half, remove pips and white membrane, chop into pieces. Simmer tomato, onion and green pepper in a saucepan until soft, rub through a sieve. Pour back into saucepan and add the juice, salt, sugar and spices (tied in a little bag). Cook for about 20 min until the sauce is thick enough, stirring continuously. Pour into warm sterilised bottles and seal.

Sue Duffy, NSW.

Here is an unreal red tomato chutney recipe. It's really good when you have a glut of ripe tomatoes.

- 2 kg (4 lb) ripe tomatoes, blended or chopped
- 500 g (1 lb) apples peeled and chopped
- 500 g (1 lb) onions peeled and chopped
- 500 g (1 lb) sultanas
- 500 g (1 lb) raisins
- 1 tsp dried mustard
- 1 tsp curry powder
- 1 tbsp salt
- 2 tsp cayenne pepper
- 750 g (1½ lb) brown sugar
- 900 ml (1½ pints) vinegar

Place all ingredients into large boiler and bring to the boil. Reduce heat and simmer, stirring frequently, until chutney is thick. Bottle, seal and label. Makes approx. 2 kg (4 lb) of chutney.

Chris Croyden, Qld.

GREEN TOMATO PICKLES

- 3 kg (6 lb) green tomatoes
- 1 kg (2 lb) onions
- 4½ cups sugar
- 2 cups flour
- 7 cups vinegar
- 1 tbsp turmeric
- 1 tsp mustard
- 1 tsp curry
- 1 tsp mixed spice
- ¼ tsp ground cloves
- ¼ tsp cayenne pepper
- Pinch mace, nutmeg, cinnamon and ground ginger

Cut up tomatoes and onions, make a brine of a large cup of salt, cover and let stand overnight. Place on heat, bring to the boil, turn out into colander and drain. Mix dry ingredients with some of the vinegar, put remainder onto heat and add to the mixture and tomatoes, stir well with all ingredients together. Keep well heated till nice and thick. Bottle while hot.

Sue Duffy, NSW.

WHOLEFOOD JAM

This jam requires no cane sugar, making it suitable for everyone. To every 750 g of fruit (except citrus) add 250 g dates. Dates make jam more nutritious and lessen the time needed for the jelling process.

From *Soil and Health*, Sept/Oct 78.

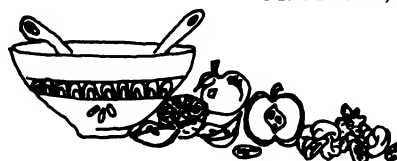
MOCK RASPBERRY

(Quince and ripe tomato)

- 1.5 kg (3 lb) quinces
- 1.5 kg (3 lb) tomatoes
- ½ cup water
- 3 kg (6 lb) sugar

Boil quinces, tomatoes and water together for half an hour and add sugar. Boil 1½ hours or until ready.

M. McCall, Ringwood.



FRUIT AND NUT SALAD

- 2 apples, diced
- 2 peaches, sliced
- ½ cup broken walnuts, pecans or almonds
- ½ cup fresh orange juice

Mix together and serve as a dessert with whipped cream or almond and banana cream.

Helena Monaghan, NT.

CURRANT TEA LOAF

- 1 cup currants
- ½ cup sugar (I use about ¼ cup honey)
- 1 cup hot tea
- 1 egg beaten till foamy
- 2 cups SR wholemeal flour

Place currants and sugar in bowl, add hot tea and stir. Cool. Mix in egg and flour, then put dough in oiled loaf tin and bake in moderate oven at 180°C for 45 minutes or until cooked.

Sally Hatcher, N.S.W.

HEALTH SLICE

- 3 cups W/M plain flour
- 1 cup coarsely gristed wheat
- 1 cup rolled oats
- 1 cup coconut
- ½ cup wheatgerm
- ½ cup sunflower seeds
- 2 cups mixed fruit, dates or raisins
- 1 tbsp skim milk powder
- 2 tbsp honey
- 2 eggs
- 340g (12 oz) butter

Mix all dry ingredients and fruit. Melt butter and honey. Beat eggs. Mix all together thoroughly and press into a lamington tin and bake in a moderate oven till firm. Do not overcook as the biscuits will be dry. Cut into squares while warm and store in an airtight container.

Jan Halbert, WA.

OUTBACK DIARY

by Maureen Wright, SA.

I remember standing in front of that silver-frosted wood stove, nearly in tears.

'What's the matter, cookie?' asked the shearer as he pulled a beer from the fridge and gazed in my direction.

'I can't possibly have tea ready on time,' I groaned. 'The pumpkin isn't cooked. The stove just won't get hot no matter what I do.'

I was desperate. It was 6.30, and at precisely 6.45 eleven hungry men would appear through the door needing and expecting a hot roast meal, and here it was — uncooked.

'Don't worry,' he replied. 'I'll just tell them it will be a bit late. They can have another beer. What's the matter with the stove?'

The truth was that I had never really come to understand this model in the week I had been at the quarters. Each day's cooking had been touch and go, and I longed for a gas oven each time I crossed my fingers as I lit the wood in the mornings.

The firebox doors were wide open and the shearer looked inside.

'Mmmm,' he said.

Picking up the dustpan he shovelled out the front row of glowing coals into the ash can. Behind was a heap of black charcoal filling half the firebox. Dead coals. No heat. He pulled out the lot and returned a few of the original coals, then laid kindling across them until they caught fire. Then he placed a couple of pieces of thin wood on top, checked that the damper was half open and closed the firebox doors until only an inch of flame could be seen.

'That'll give a good draught. Now when it's really burning we'll close down the damper and the oven will heat up.'

I thanked him and he wandered off to tell the others that tea would be late. The stove was rumbling away and a cheerful blaze promised a cooked meal.

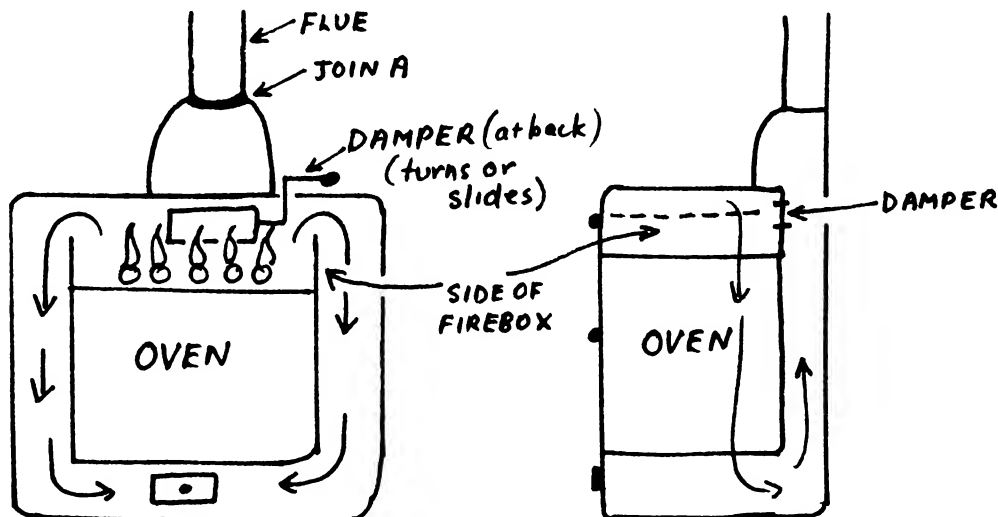
What had I done wrong? In an effort to get more heat I had been piling wood on too heavily with the firebox doors wide open. It was not burning properly because the base of the flue was broken, but at least I managed to cook with it after my lesson. Thereafter I cleaned out the firebox a couple of times a day and had no more trouble.

I've battled with the idiosyncrasies of wood stoves in many shearing quarters and been taught how to use them by experts. Every single wood stove is different in temperament. Once mastered they cook food beautifully. I find them very good when cooking for a lot of people because of the space they provide on top and in the oven.

I have come across a few that have parts missing or are damaged, and this can cause difficulties. A damper that will not close means that there is always a draught over the fire. It will burn well, but much of the heat goes up the flue. The top of the stove will get hot but the oven will not heat properly all round. Shutting the damper confines the hot air to the cavity around the oven and forces it around the oven, so heating it uniformly. If the bottom cavity (under the oven) is full of ash or soot from the flue the flow of hot air is restricted, so I have learned to scrape this part out periodically with a long-handled scraper (a piece of steel strip about 1 cm (½ in) wide and bent at right angles at the end does the job). A small rectangular door underneath the oven door on most stoves gives access to this region.

The long chimney or flue at the back of the stove draws the air across the fire. If there is a gap at the join between the flue and the stove (A in the diagram) or if either part is cracked or broken (as in the silver-frosted stove), the efficiency of the chimney is lost and I find I have to build a roaring fire in the box to get any heat in the oven; then cakes burn on top before they cook through.

At 5.30 a.m., with my eyes only half open, I am not the



best fire lighter around. Therefore I have found it best to clean the firebox out the night before and, if it cools enough, re-set the fire then.

Correct setting of the fire was shown me by a farmer who had 'batched' for many a day. He laid three solid pieces of wood in the firebox roughly 20 cm (8 in) apart, ends towards the front. Between them he placed loosely crushed paper and then across the logs several pieces of kindling wood and a few larger pieces of wood. The main idea is to allow plenty of air space under the fire to give it a good start. Open the damper up wide, light the paper, and close the firebox door leaving a small gap to get a good draught (or open the slots in the front). When it is burning well add more wood, let it 'catch', then partly or fully close the damper to begin heating the oven.

After using gas and electric stoves, I find that it takes some time to get used to thinking ahead with a wood stove. The fire has to be lit, burn well, and die down a little before putting a cake in the oven, otherwise it will burn. Temperatures are a matter of trial and error. After quite a short time I found I could pick cooking temperatures by putting my hand in the

oven for a second or two.

I have had some trouble with stoves incorporating water heating; not the ones which have a built-in water compartment in the side (very useful) but ones which have pipes running through the firebox so that the fire, as well as heating the stove, heats the water in the pipes, which circulate water from a storage tank nearby. The pipes draw heat from the fire and can leave a pile of black coals in the firebox, and a half-cold stove. On one stove with such an arrangement I found I had to have tea cooked before the men came in to use the showers. Once the hot water was being used there was no way I could get the oven hot enough to cook a meal.

This stove might not look anything like yours; some have fireboxes at the side or even in the middle with an oven on each side. However all the parts are fundamentally the same and the stoves all cook well if they are in good order.

PS. The bottom part of the oven can be just as hot as the top if the stove is working well. I start by cooking in the middle and experiment.

Land Link

I have a 27 acre farm with a 3 B/R house, two dams, two bores, good soil, chickens, ducks, well, tractor, water pump etc., five miles from town. I intend starting a market garden and I need a male with same interests to share in the venture. No financial outlay required, just an honest farm-loving person. People requiring further information please write to my address or phone reverse charge.

Bruce Smith, 'Starlight', Old Grattai Rd, MUDGEE 2850. Phone 063-722-074.

We want someone to caretake our farm in May for a few weeks. We live in Gippsland mountain country. In return we can offer not only a beautiful environment but vegetables and eggs (and rabbits for meat eaters!) We would like to offer the right person, single or otherwise, a site on which to build a house out of natural materials in return for occasional

We are a family of 4 (he 40, she 34, plus children 5 and 3) wanting to live an alternative lifestyle to the one we have already experienced in our non-drug taker, have some experience of gardening and farming (or at least be willing to learn) and trustworthy.

Liisa and Col Anderson, RSD, BUCHAN 3885.

We are a family of 4 (he 40, she 34), plus children 5 and 3, wanting to live an alternative lifestyle to the one we have already experienced in our nuclear-style family. We wish to live on a commune, having our own accommodation and joining the other members for meals, growing vegies, etc. Our interests include yoga, relaxation teaching, personal growth groups, poetry writing, gardening, etc. We already own our own home so we can provide a substantial amount towards a share in costs. We would prefer a rural or semi-rural aspect, somewhere in NSW.

John & Edwina Levack, 67 Dalgety Cres., GREEN POINT 2250.

A very unusual garden has been developed in north Queensland in the tobacco town of Mareeba. There are 4½ acres of extensive landscape tropical gardens, a natural river pool, accommodation for an intelligent strong young man interested in all phases of nature. I am looking for a genuine nature lover who wants to leave the rat race.

Bruce Andrews, Mary Andrews Memorial Gardens, PO Box 186, MAREEBA 4880.

We are a couple in our early thirties with three children (12, 11 and 6). We would like to hear from anybody in Tasmania with a property where they would allow us to put our caravan for about four months in exchange for helping with jobs on the farm a few days a week. My wife and I have owned a dairy farm in the past and would be willing to help with this type of work if required. We are quiet, honest and both non-drinkers and non-smokers.

Peter Hern, Lot 6, Bonna Road, BUNDABERG 4670. Phone 071-765-142.



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DESIGNING FOR ENERGY EFFICIENCY AND SELF SUFFICIENCY

Part VIII

by Stephen Ingrouille, Melbourne.

Towards the end of this article, I will be discussing frost-protection kits, so if you have or intend buying a solar hot-water system, make sure you read that section.

Some months ago, the NSW Department of Environment and Planning sent me the brochure *Multiple Occupancy On Farms — How It Works*. I note that the brochure was mentioned in the Information Available column of GR No. 34, but I think it is worth looking at in more detail here.

Multiple Occupancy On Farms is perhaps most interesting because it shows the direction of planning policy being taken at state government level in NSW. Basically the brochure is aimed at three groups: firstly at the public, and particularly owner-builders, who are considering living communally in a rural area; secondly at members of councils who are considering amending their local environmental plans to permit multiple occupancy; and thirdly at the staff of councils who are asked to supply information to members of the public and of council on the introduction and administration of multiple-occupancy development (which they also refer to as Hamlet Development).

It is pleasing to see such a document, in which a state planning department tries to create some positive cooperation between those who want to live on the land and those who are elected and employed to help us create settlements within the restraints of good planning and healthy respect for our neighbours and the environment. Alas, I still hear of too many cases where councils or council employees, without sound reasoning, actively try to prevent 'new settlers' or disallow the construction of certain types of building. Surely a building inspector should not be able to prevent less conventional types of shelter solely on the basis of that inspector's lack of knowledge of that type of construction!

Certainly owners of property and builders of dwellings have to be aware that certain sound standards have to be reached, particularly in respect of building and health regulations, bushfire safety, and land-development problems. Here councils have an important role, and perhaps rural councils should be helping further with sound development, for example, along the lines of Permaculture and the ideas presented in Part III of this series (GR No. 29, p. 64).

Back to the brochure: the multiple-occupancy policy 'is intended to accommodate a wide range of possible lifestyles and has the potential of meeting the aspirations of different income, age, and cultural groups.' It is 'a type of rural development where groups of people, not necessarily related to each other, live on rural properties in greater densities than the traditional one family dwelling per farm. . . farming is not necessarily intended as the primary source of income.' A variety of arrangements for dwellings would be possible (where multiple occupancy was allowed), and these may vary from a cluster of single family houses, to expanded houses

with separate structures for sleeping, but a shared structure for eating and washing.

At the time of writing, multiple occupancy is permissible only in certain areas, but it is hoped the Department's brochure (and their policy Circular No. 44, July 1980) will be the basis of more intelligent development. Of course there are restrictions on hamlet development, which are set out in Circular No. 44. Some of the restrictions are that a minimum area of land is required and that once an area is designated as 'multiple occupancy' it cannot be subdivided. Developers cannot use multiple occupancy to build houses for rental or sale, in fact 'multiple occupancy can only be granted if at least two-thirds of the adults living there are joint owners of the property.' And while land with multiple-occupancy status cannot be used for commercial purposes (such as motels and tourist resorts), temporary accommodation for teaching and workshops may be permitted: 'The policy aims at preventing exploitation of planning provisions for commercial purposes not associated with the alternative lifestyles of the new settlers.'

It is up to the local councils to determine what areas may be excluded from hamlet development, such as prime agricultural, flood-prone or environmentally sensitive land. It is also the council's responsibility to take into account potential bushfire and erosion hazards, and proposals for water supply, drainage and waste disposal. Councils may also decide to levy higher rates on multiple-occupancy properties than on conventional rural farms.

Residents in hamlet developments are not allowed to build substandard buildings and of course are subject to the same building and health regulations as others. The NSW Department of Environment and Planning, again in an attempt to bridge the gap between the needs of owner-builders and the problems of building and health inspectors, has published a book called *Low-Cost Country Home Building — a Handbook on the Essentials of Low-Cost Construction for the Guidance of Rural Homebuilders*. (The book is available from Going Solar at the address listed at the end of this chapter.)

If you are interested in multiple occupancy, and intend to live in rural NSW, approach the council with the responsibility for your area and see what codes they have adopted. I suggest people in other states firstly contact the relevant state-government department to obtain an overview, and then approach the local council. I contacted the Department Of Planning in Victoria, and as usual I was shunted to various offices, but the staff were very helpful. They had not seen or heard of the NSW Department brochure, which struck me as strange, as I would have thought there would have been some kind of flow of information from state to state, particularly

where planning is concerned. They presented two almost contradictory answers to my question on the possibility of hamlet development in Victoria. On the one hand they said there was no need for multiple-occupancy policies in Victoria, because councils had been very strict, and there was not the problem of (unauthorised) buildings that were apparent in NSW. On the other hand, they also said that it should be possible to persuade councils to agree to multiple occupancy under existing legislation, and that some councils had no planning codes at all. They did mention that some councils sometimes went out of their way to make things difficult for new settlers, and that in one case at least a council was actively trying to evict people.

The NSW brochure makes special mention of the fact that when making an application for multiple occupancy, care should be taken because of the expense of submitting plans: 'When a development application is made, payment of a fee is required. The calculation of the fee is related to the estimated value of the proposed building work. There is obviously some difficulty in assessing the value of dwellings which rely on self-construction methods, natural or recycled materials, and which are not readily marketable as separate entities. It is hoped that both applicants and councils will be reasonable in seeking a realistic level of fee in such cases.' In Victoria at present there are no fees for general development applications, though there are indications that some may be introduced in the future.

I want to recap on frost-protection kits for solar hot-water systems. In Part II of this series (GR No. 28, p. 39) I mentioned the need for an antifreeze device if there was any danger that your solar panels would be subject to frost. That article was published in summertime, and if one is buying a system at that time of the year, it is often easy to forget that the water in the pipes can freeze, expand and burst the pipes, which can be costly to repair.

For many GR readers, of course, frost will not be a problem, but where there is the slightest chance, we highly recommend a protection kit. In fact, we try to sell a kit to everyone who purchases a system, because in the long run, it is cheap insurance.

Frost occurs on clear, still, cloudless nights, and tends to settle on the lowest areas of land. Frosts can do great damage to plants — hence the need for greenhouses — though plants placed under trees will have a degree of protection.

I'm emphasising the problems of freezing, because in Victoria last winter was a particularly frosty season. In Melbourne, even plants placed under trees were badly burnt by frost, and at our place the frosts hit the tops of tall oak trees, well above the roof line, and would have affected a solar hot-water system without an antifreeze device. While I heard of many solar panels (flat plate collectors) bursting throughout Victoria, to my knowledge none of the clients who purchased systems from us had problems, though some who thought they were in frost-free zones (such as near the sea) quickly purchased antifreeze kits.

We recommend the antifreeze device mentioned in Part II, because during the life of the solar hot-water system — which may be as long as sixty years — the probability of one

heavy frost is quite high in the southern parts of Australia. Kits are available for thermosyphon (tank in ceiling) and close-coupled (tank at the top of the panels) units. Mains-pressure forced-circulation solar hot-water systems normally have temperature-sensing devices built in.

For those people who have never seen a frost, it is quite a sight: a white layer of ice covering the ground, buildings, cars and trees, like a huge sheet. It can also be quite a danger. Whatever time of year you purchase a solar hot-water system, remember the last heavy frost.

The following equipment and books are available by post or from the shop:

Antifreeze Kit for Low-Pressure Thermosyphon Systems, \$100 (or \$102.50 posted).

Antifreeze Kit for Mains-Pressure Close-Coupled Systems, \$60 (or \$62.50 posted).

(These kits consist of two small valves and fittings which are positioned at the bottom of the collectors, one at each end of a bank of panels. When the temperature drops to 4°C, the valves open, draining the water out of the panels (usually onto the roof so it can be recycled if you are on tank water) and allowing a little warm water to flow back from the tank. They do not rely on time clocks or electricity but work on temperature, so there are no problems if you do not have the mains connected, or if a blackout occurs.)

ANZ Solar Home Book, \$9.95 (or \$11.85 posted).

Low-Cost Country Home Building, \$8.95 (or \$10.85 posted).

Prices subject to change. Books, kits and advice available from: Going Solar, 320 Victoria Street, North Melbourne 3051. Phone 03-328-4123.


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WOOD WASTES IMPROVE SOILS

by David Stephen, Taroona, Tasmania.



Visitors to my gardening demonstration days often remark on the superb tilth and depth of crumbly soil in my back yard. (Beds of food crops take up about a third of our half-acre block.) When I explain that it is mainly due to the use of composted sawdust — all 60 m³ of it over eight years — some find it hard to believe.

I have green hardwood sawdust carted in, 15 m³ at a time, for \$35. There is now only one Hobart sawmill left which has not committed this beautiful by-product to the furnaces of the local brick company for use as a source of energy.

In my experience, the advantages of sawdust as a soil conditioner over other organic resource materials (such as hay and straw) are as follows:

Sawdust is already friable; it is high in carbon compounds and lignins for long-lasting humus; it is lightweight and free of weed seeds; its compact nature does not hide snails, and worms feed on it; it is cheap to buy; it is low in moisture and adds bulk to soils for establishing a suitable crumb structure providing channels for water and air retention — so necessary to the fertility of a heavy soil in particular. Sawdust is free of weedicides and other biocides too.

Sawdust has a very high carbon:nitrogen ratio, and so is liable to induce (temporary) nitrogen deficiency unless adequate nitrogenous manures are added to it. I like fresh poultry and pigeon droppings, blood and bone or meat meal. I mostly use pulverised poultry manure supplemented with many litres of urine — another good source of nitrogen which I like to recycle (and why not? It costs nought and can be collected and stored clandestinely in the cellar next to my humus thunderbox, where nobody's nose knows!).

There is no well-founded evidence of toxic properties in ordinary sawdust, unless picked up from joinery workshops etc. where CCA-treated softwoods are sometimes used. Sawdust has been used for generations as an effective absorbent in stables and butcheries, and as deep litter for poultry. It has a slight acid reaction until added to or composted with organic manures, most of which are alkaline.

Although decomposed sawdust is low in food value for

plants (see table) its use as a soil conditioner does not markedly reduce fertility in my heavy soil compared with sand where an equal quantity is used. A good garden loam is said to consist of equal parts of sand and clay with added humus of 5-10%. I use four methods to prepare green sawdust for digging in as a soil amendment:

1. About twenty barrowloads are used between the raised beds, up to 30 cm (12 in) deep, and used as pathways until decayed in eight or twelve months' time, when it is shovelled onto beds as a summer mulch. Upon removal of the crops in early autumn, the mulch is worked into the soil with a little nitrogen activator ready for broad beans, cabbage, lettuce etc.

2. Dump four barrowloads into the poultry run every four months for processing into a fine black compost.

3. Clean cultivate some land and water it thoroughly down to the subsoil. Now spread two bags of green sawdust over each bagful of fresh manure, and keep moist for two weeks. The sawdust will turn dark brown. Lightly cultivate this into the top layer, mixing soil with it but not burying too deeply. Keep moist for a further two weeks and then plant potatoes, silverbeet, brassicas, and so on. Or, to improve hungry sandy loams or clay, repeat the process to double the rate of conditioning.

4. To compost sawdust manually, I like to use a large wooden crate with the bottom still intact. Or an old water tank — 400-gallon size is perfect. Use two parts of sawdust to one part of nitrogen-rich manure, keep it moist and turn as often as you have time — at least daily for about two weeks. When cool, this recipe would be delicious food indeed for earthworms, either in the garden or in breeding boxes.

The only time I have found horse manure effective as a sawdust activator was when I pulverised the half-moist droppings first, before adding an equal quantity of sawdust and watering well. I would love to hear of other gardeners' experiences using wood waste.

Write to David at 12 Delta Avenue, Taroona 7006.

Plant Nutrients Compared (lb per ton of dry matter)

MATERIAL	NITROGEN (N)	PHOSPHORUS (P)	POTASH (K)	CALCIUM (Ca)	MAGNESIUM (Mg)
Sawdust	4	0.9	3	4	0.3
Wheat Straw	10	1.3	10	3	0.7
Lucerne Hay	48	4.4	23	20	4.2

MULTIPLE OCCUPANCY

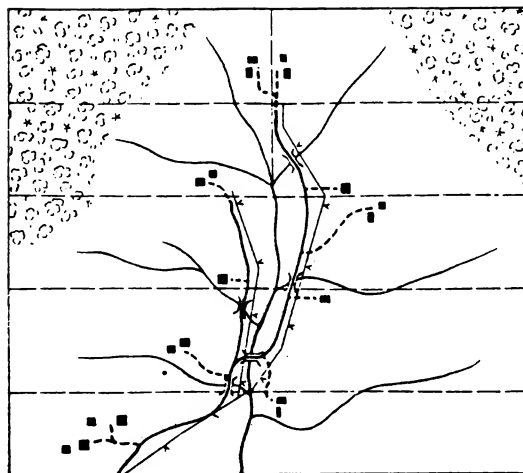
by Scott Williams, Armidale, NSW.

Have you ever been puzzled about why shires seem unwilling to grasp the issue of multiple occupancy, hamlet development or communes and take some positive steps towards legally permitting those forms of lifestyle? Perhaps the councils are against the issue because of the 'hippie' image of the new settlers or perhaps it is just that they are stuck in a cleft, what with poor communication between councils and people of radically different lifestyles, the legal obligations put upon councils by the State-Government regulations, and the sheer volume of work in the Planning Departments of shires where resettlement is booming.

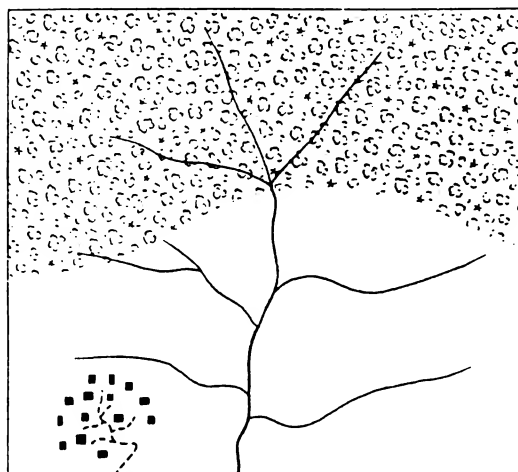
The Australian Rural Adjustment Unit (ARAU) is an independent (non-government) organisation based at the University of New England in Armidale, NSW. The staff of ARAU attempts to work for better lifestyles in the rural communities of Australia. It seems to us that the multiple-occupancy method of owning rural land is increasingly the only option left open to people wishing to 'go bush'. The escalating cost of land, especially in prime coastal shires that are also booming with hobby farmers and retirement couples, together with increasing unemployment, means that potential new settlers are not able to earn money fast enough to keep up with land-price inflation. Multiple occupancy is expected to increase out of all proportion to its current level. And that worries us! Few shires appear to be taking positive steps to handle the present multiple-occupancy scene, let alone what's likely to happen in the next decade. We suspect that there will be an increase in conflict between councils and new settlers and we see this as being largely caused by a lack of complete understanding by each side of the views and obligations of the other.

ARAU has decided to wade into these murky waters to attempt to formulate some consensus of opinion between councils and new settlers on the issue of multiple occupancy. We hope that this will lead to a 'checklist' which will help to support applications to councils by new settlers and can be given to new settlers by the council to assist them in their applications, thereby speeding up the whole process and reducing the chances of conflict between the two groups.

We aim to run a series of three workshops on multiple occupancy, initially in NSW. One workshop would bring together interested new settlers to agree on a log of claims on the shire councils. This would not include building regulations, since these are beyond the power of the councils, but it would include such issues as access roads, water supply, sanitation, fire and erosion control, rate policy etc. The shire councils will be invited to produce a similar log of claims in another set of workshops. We hope to bring representatives of both groups together at a third workshop aimed at reaching a consensus on the two sets of claims. Where consensus is blocked by grey areas in the State-Government regulations,



A typical subdivision involves a high investment in services – electricity, phone, roads, bridges and fences as well as outbuildings and increased forest clearing.



With multiple occupancy, houses are clustered in one area thereby reducing service costs and allowing more of the natural bushland to be preserved.

we hope to have a panel of technical experts from the various government departments to provide more information or to undertake to clarify the legal aspects.

To do all this, we need your help! The reason is that we cannot easily find new settlers who would be interested in participating. If you are interested in helping us to try to reduce the chances of problems with multiple-occupancy schemes, please write to: Scott Williams, ARAU, University of New England, Armidale 2351. Phone 067-732-263. We hope to have the NSW workshop in March/May and we will go to other states if there is enough interest from you.

OOPS . . .

In the last issue of *Grass Roots* (No. 34), we informed readers that David Stephen's 1983 Organic Gardening Calendar was available but omitted that it could be obtained from *Grass Roots*. Anyone interested in gardening will really love this handy, large-format calendar. It includes historic illustrations of the different vegetable varieties with gardening information and a monthly sowing guide for each climate. There is ample room beside each day of the year to record

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Land Link

Are there any peaceful people who are interested in leasing out a small piece of excess land in exchange for two or three months of down-to-earth labour. I have experience in mudbrick construction, landscaping, design, plus handyman work. I am looking for something at least 1000 ft above sea level, isolated, natural vegetation and preferably between Ingham and Cairns. I am a 23 years-old male in pursuit of total health and longevity through fruit, fasting, yoga and gardening – basically Buddhist in outlook and would dig to be close to similar-minded people.

Lander Clifton, 2/56 McIlwraith St., STH. TOWNSVILLE 4810.

We need some animal and house-sitters for 3-4 weeks around Easter, 1983. We have 100 acres, 25 miles from Grafton in northern NSW, and we are offering free accommodation in exchange for the care of 2 dogs, 2 cats, chooks and a small veggie garden. The house has four bedrooms (including a nursery), has no electricity, but is reasonably comfortable in a rustic way. The property is close to the Clarence River (good for swimming and fishing) and close enough to both the coast and mountains for day trips.

Annie and Geoff Welham, C/- P.O., COPMANHURST, via Grafton 2460. Ph: 066-473-129.

I am a 19-year old nature lover – capable with animals, especially horses. I am looking for work as a helping hand on a farm. Other interests are veggie gardening and self-sufficiency. I would like board to be provided and a small wage. Can be anywhere in northern NSW or into Qld, and preferably starting early this year.

Donna Bolam, 'Parkside', FORBES 2871. Ph: 068-532-202.

Surrounding our business we have a mixed farm setting with 1,000 Merino sheep awaiting shearing, 4 horses, a milking cow, a peacock, ducks, hens, pigs and dogs. Nine people now live in our community and visitors are welcome provided notice is given. We offer food and board for work done. Visitors receive experience in a number of possible avenues on this very much alive farm.

M.A. Shepherd, Gunningbar Yurtworks, GOULBURN 2580. Phone 048-292-114.

I am a 22-year old female German and have been travelling in Australia since one month. At the end of January I will travel to Tasmania and on the way up again to Brisbane (I have no car) I would like to share life, work and time in a self-sufficient commune or farm. I don't have a lot of experience in farming but I am very interested and know that I can work without payment and need only simple accommodation. It would be a pity to leave Australia without having seen part of your alternative countryside lifestyle. Please answer quickly because I have to apply for another visa in case. I look forward to your letters.

Lisa Willer by Anderson, 86 Wibbesley St., MACKAY 4740.

We are two young travellers (22) from Victoria touring Australia anti-clockwise in 1983. We very much need work along the way to keep going so would be most appreciative to hear from anyone anywhere who could help us. Should monetary payment be inconvenient we are prepared to work for our feed and lodgings. We are both strong, honest, hard workers and have various qualifications and experience in horticulture, permaculture, organics and some building but willing to try anything. Promise to reply. Thank you, Wayne and John.

Wayne Coppock, C/- PO Box 371, ULLADULLA 2539.

Do you like cold winters, open fires, hot summers and shady trees? Are you an energetic lady, intelligent, about 35 and fed up with life in the fast lane? We are a young couple with two boys enjoying an alternative lifestyle on 62 acres. In a house full of males she needs female companionship, conversation and help.

Kathy & Peter Moss, PO Box 57, GLEN ALPIN 4381.

With 3 acres, a 9-months old baby and husband having to take full-time work 'things' are getting out of hand. Is there an energetic person who would help a few hours daily with garden, animals, house, etc., in return for full board (separate bungalow). We'd prefer someone interested in learning about organic gardening.

N. & R. Stewart, Lot 93, Glenfern Road, UPWEY 3158. Phone 03-754-3735.

I see from the letters some people are willing to provide food and accommodation in return for work, which appeals to me as I plan to tour the eastern side of Australia, starting off around January or February next year. I'm particularly interested in experiencing the alternative lifestyle and meeting the people who are involved in it. If there are any readers who need a hand I'd much appreciate hearing from you. Accommodation isn't necessary as I'll have a tent and accessibility isn't a problem as I have a small 4-wheel drive vehicle. I am a 26-year old Englishman, adaptable and easy-going, and willing to work hard. My travel arrangements are very flexible.

Simon Brownbridge, 4 Grosvenor Parade, BALWYN 3103. Phone 03-836-1857.

I am 21 and most interested in learning of any urban communes . . . or just a team of earthy souls I could share a house with in Sydney. I'm looking forward to joining people whose 'grass roots' existence lies just around the corner, but like me they are tied to the clutches of the city a little longer than planned. Any suggestions? Please write to me:

Tori Bail, 21 Miretta Place, CASTLE HILL 2154.

We're a family of 4 (my wife and 2 girls). We're after a small block of land, 2-5 acres, somewhere in Tasmania. Must have permanent water, electricity nearby and some sort of building we can make liveable. We will be visiting the island on 25th April, 83 on holidays. We have our own accommodation and would like to meet other GR readers and see how they're getting on. All letters welcomed and answered.

Blue & Polly Allingham, C/- Post Office, BLUFF 4702.

We're finally moving out of Sydney and are planning a trip down south in May 83. We are especially interested in visiting GR people or working on communities in Tassie, southern Victoria (Lorne/Portland) and NSW south coast. We'd love to hear from anyone in these areas. We have a 2-year old boy, Zeke. We're non-smokers, not into dope.

Mick, Linda & Zeke Pottage, 37 Austin Ave., NTH CURL CURL 2099.

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The venue (36 km from Devonport; 16 km from Burnie) is adjacent to the OGFS's new 7 ha Organic Growing Centre, where an organic garden has been established for demonstration over the weekend.

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Registration fees: \$8 per person per weekend

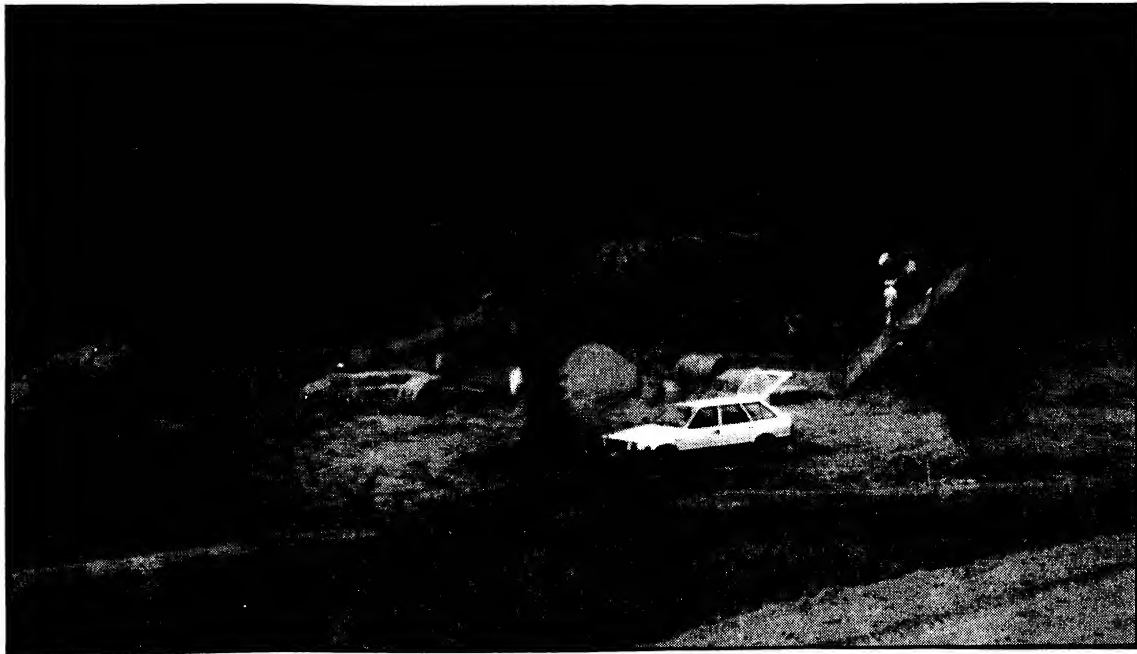
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Enquiries: Neil Jordan, 65 Main Steet, Zeehan, Tas. 7469.

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Planting the garden at the Organic Growing Centre, Penguin.

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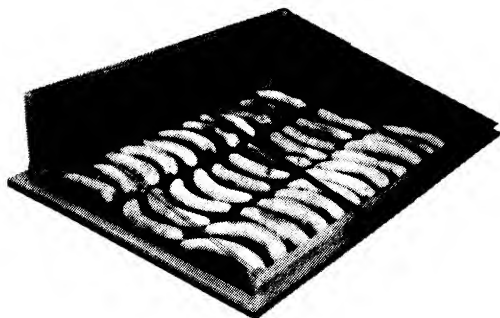
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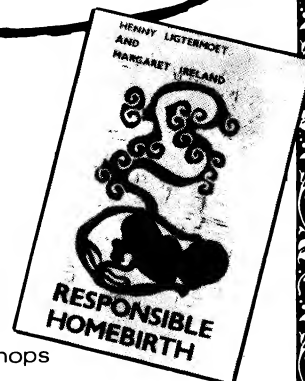
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HANDY HINT

To separate sunflower seeds from the flower head, scrape the head across an old washboard. Works like a charm.
Mitchell Grodd, Bethlehem, Pennsylvania. *Organic Gardening*, Aug. 82.

Down home on the farm..!

by Meg Miller



Don't count your chickens before they are hatched, don't count your poults before they are hatched, don't count your keets before they are hatched . . . I staggered into the house and fell into the nearest chair. After about 10 minutes David supportingly asked, 'Anything wrong, luvvy?' 'No', I said, 'nothing's wrong — luvvy! It's just that eleven more keets have hatched, and I've discovered another two nests with setting Guineas on about fifty eggs between them.' Need I say that it was my turn to ask 'luvvy' if everything was all right?

We are already known in the district as the 'Guinea-fowl people' because our birds are convinced the other side of the road is greener, and spend large amounts of time darting and lunging in front of cars and school buses. Suffice to say they don't always make it!

Actually, so well known is our love of Guinea fowl that someone in the neighbourhood felt we would not notice a few more, and popped his/her noisy crew over our fence one recent dark night. Unfortunately they are garden-loving Guineas and quite destructive, so we spotted them immediately. Spotting Guinea fowl and catching them however are not necessarily related tasks, as any keeper of these birds will know, and they are still roaming freely.

But back to the eleven little keets. I had found them under a bush in the front garden being lovingly nurtured by a jubilant turkey hen. She must have discovered the nest and taken it over, perhaps dispossessing the owner by force. Alas, the usurper's enthusiasm was not equalled by her agility or carefulness, for already there were a number of squashed bodies. I hated taking them away from her but knew from experience that a 15-lb plus turkey and newborn keets just do not mix. So, what was to be done with them? A chook, I thought, there's always a spare broody chook around somewhere. The first hen I found was adamant — this box on the ground was not *her* nest so why should *she* cooperate? The second one cluck-clucked over the eggs I put down to encourage her and rolled them protectively under her wing. When darkness fell I took the keets out and slipped them under her. Checks later that night showed her quiet and contemplative with the keets snuggled in for the night. Unfortunately however, by morning she had decided they were smelly little fellows and most definitely not hers. She had killed one and terrorised the others by the time I let her out, but the experience, I might also add, cured her of her broodiness! So I put the keets into a box and set them up in the bedroom under a lamp (for warmth), to relax and come to terms with the rigours of the last few hours.

You are not going to believe this but somewhere, somehow during that day I lost two of those keets. Memories of the turkey poult in the bed came to mind. 'Don't worry', I told

myself, 'they'll turn up.' I searched the bedroom, made the bed and sorted through miscellaneous clothes. I searched every corner. I even looked under and behind everything in the lounge. Well, I didn't find them and I still haven't. There are no nasty smells around, nor did we come across any beaks or feet to indicate a cat attack. Mystery and intrigue! So now we are the ever-suffering 'parents' of eight Guinea keets, well wired into their little box on the kitchen table. I refuse to think ahead of the problems we may have with them — live one day at a time is what the good books say.

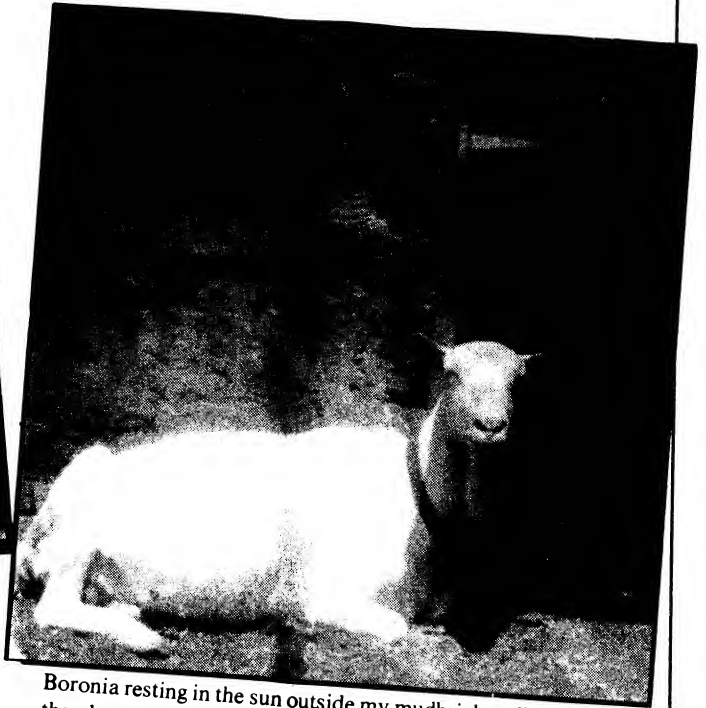
The other happenings around the place seem quite tame after our unsolved mystery. We are back to keeping one goat after years of running a small herd of anything up to fifteen. The feed situation is disastrous — I have included a photo of the paddock directly behind us which in other years has been cropped, but this year is almost bare earth — and the thought of months to come with little change provided the catalyst for action. We advertised locally and sold all but dear old sly, sneaky, thieving Boronia. Although she is elderly she is a steady milker and can easily supply the small amount we require for the house.

Boronia has an inbuilt monitoring system that shames modern technology in its accuracy and consistency. She can 'feel' when the garden gate has been left unlatched and never misses an opportunity to demonstrate this skill to us. Because Boronia is eight years old, we have been most solicitous in our care of her. However she proved recently that there is still plenty of life there yet. This year, we have decided, is a 'keep-fit' year for the Millers (groan) so we have been partaking of an occasional jog. We set off in sprightly fashion one evening last week, and after some distance were surprised to hear heavy breathing behind us. Yes, Boronia was not going to be left on her own and had joined in with us. We tried outrunning her but she gamely laboured on, and we were obliged to turn around and take her home. I had the feeling she was very pleased to stagger under the office and collapse undisturbed for a long rest. This marathon-running goat has not turned up for training since, which is a relief as her milk output had definitely taken a tumble for a day or two.

The turkey poults are growing up fast and within a week or two we hope to have them out of the garden. They have been very hard on it, stripping herbs and the small number of vegies we have been able to grow in their search for greens, but as usual, a compromise is involved. The young turkeys we have raised with access to green feed have proved stronger, healthier specimens than those on supplemented feed, and in view of all the work that goes into raising them it seems pointless not to do whatever you can in their favour during those first few months. Deficiencies of vitamins A and D seem to be involved in a number of the diseases they fall prey



Sunshine nursing a little gosling, the first one our geese have managed to bring out after many unsuccessful attempts.

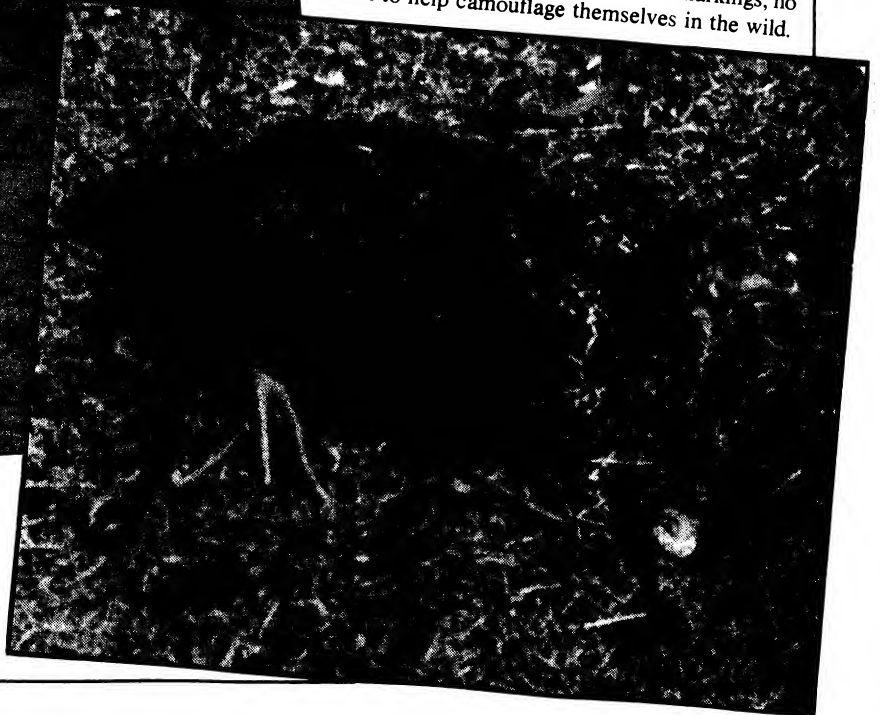


Boronia resting in the sun outside my mudbrick wall. She fills the days by keeping a constant eye on this door to the grainshed and the garden gate.



This bare paddock next to us is typical of many in our area. Virtually no ground cover remains and the exposed topsoil is slowly being blown away.

Believe it or not, but this Bronze turkey poult is enjoying herself – having a sun bath. Poults of this breed have very distinctive, attractive markings, no doubt to help camouflage themselves in the wild.

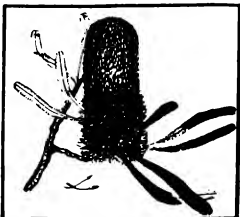


to, so it is important for them to have green feed if at all possible.

Once the young poultz develop their unique neck ornamentation — the dewlap and carbuncles — they seem to have greater resistance to the many ills, and you can sit back and count your future flock. We have ended up with ten poultz and a Guinea keet who thinks he is a turkey; two poultz succumbed to mystery ailments. It is a far cry from the thirty plus poultz we raised last year, but then drought conditions were not really upon us then.


We enjoyed our Christmas break and spent it pottering around doing odd jobs and enjoying being together. Sunshine and I spent several days raking out the poultry pens, collecting loads of fowl manure and raking up the large yard surrounding the pens and the office. It was quite a job and my little willing worker was most welcome. David postponed his mudbrick making and instead put up a turkey compound in the orchard. This is a large enclosed yard that really looks as though it should be a tennis court. We are vainly trying to get some ground cover growing and as soon as there are a few green shoots, in go the poultz. They will thus be assured of protection from the bullies out in the big yard and any competition for food. It also gives them an opportunity to toughen up and develop some resistance to any diseases or parasites our flock might have before they are thrown in with them.

This is an exciting month for us — the long-awaited dream of having our own few acres is becoming reality. We are in the process of buying land in a mountain range some twenty miles away. It is a mixture of grazing and bushland with a small creek (presently dried up) and a number of water soaks. It will be several years before we will be ready to move onto it, with a house, sheds and yards to go up first. The initial project will be sheep yards and a small shed, and at the moment we are about to acquire a small flock of carpet-wool sheep. Our years of experience with our coloured flock back in the 70s will no doubt prove invaluable here. As we have neither a sheep dog nor a farm bike you will understand why 83 is a 'getting fit' year. To be able to run after sheep (and bark at the same time), move stone, put up fences and make the occasional mudbrick and not pull a muscle or suffer from back trouble requires a sensibly prepared body. The prospect of the next few years is exciting and challenging, and something we hope we can share with you all — just as so many have shared their early trials and tribulations with us. Roll on 83 and may each day have an extra hour in it!

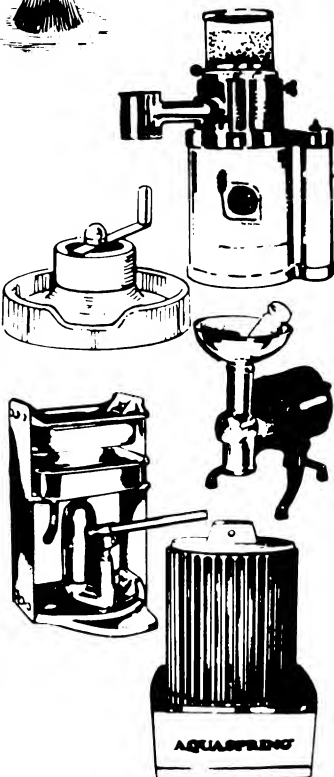


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There is a fee of \$5.00 for each Unclassified and we do appreciate it if you can limit your advertisement to 75 words. Please mark envelopes 'Unclassifieds' and forward payment with the advertisement.

FOR SALE: Lorrina, Tasmania, pretty valley on Lake Cethana, 40 mins drive from Sheffield – 3½ acres cleared but with plenty of good trees still standing. Block has easy access to road and is close to newly established alternate school. Good aspect and views, with plenty of potential for gardens and orchards. Shed and toilet on block. Price \$4,000. Contact:

E. Koops, C/- Post Office, KINDRED 7310.

WANTED TO BUY: Bush block with habitable dwelling. Water essential. On vendor finance: have \$5,000 deposit. Up to \$20,000, balance over 4 years. Prefer mid to far north coast area. If you can help us write or phone.

R. & V. Leonard, C/- Springfield, Parkes Road, WELLINGTON 2820. Phone 068-451-504.

SHARE FOR SALE: 6.5 ha, partly cleared with access to spring. Three miles outside Bowraville 2449 on Bellingen road. One share out of two still available, approx. \$15,000.

Phone 065-647-453 and ask for Ulli or Lili.

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LAND WANTED IN TASMANIA: Balance between bush and cleared land but with good soil and permanent water. Preferably in an area with community-minded people. Would consider a share in a cooperative landholding. We have cash up to \$30,000.

Pam Benemann, 25 Delamere Crescent, LAUNCESTON 7250. Phone : 003-312-873.

SELF-SUFFICIENCY AND HERB COURSE AT EASTER: 3 days, live-in, starting Thursday 31st March 6.30 p.m. to Sunday 3rd April 5 p.m. Covering herbs, wildfoods, organic gardening, permaculture, alternative energy, etc. \$65 (inclusive food and accommodation). Deposit of \$10 to:

Lothlorien Herb Farm, Ray Painter, PO Box 254, YANDINA 4561. Enrolments only phone: 071-467-520.

WANTED: Single person or couple with sober habits and no drugs. Prefer with own caravan to live on 8 acres in NE Victoria and feed 18 dogs in owner's absence. Property has pasture and trees, good views, town water, mains power, bitumen road, has a shed with hot water, shower, washing machine and toilet, 2 km from town, 120 km from Melbourne. Wage negotiable.

Haydn Harrington, Ruffy Road, LONGWOOD 3665.

SHARE AVAILABLE: Quarter share available in the beautiful Thora Valley NSW. One hour south Coffs Harbour, 40 minutes from secluded beaches. Would prefer people into healing and higher consciousness. The property is 40 acres, mostly timbered, very lush, close to a beautiful river and swimming hole. Price is \$9,000.

Phone Dianne on 066-558-564 or 066-551-585.

SHARE FOR SALE: Around \$13,000 gets you a ¼ share (3 shares already gone) in 170 acres of outstanding land: 110 acres of forest and 60 acres and share the forest and pasture with 3 other households. Families with children get preference. There's nothing too idealistic about this one – just good people wanting to live off the land. All-year-round water, \$200 to get the power to you and beautiful views in a pleasant small community in the forest. For more information write:

Di Drachenberg, C/- Post Office, WALPOLE 6398 or ph. 098-401-153.

FOR SALE: 25 acres bush, southern Tasmania. Situated at Woodbridge, 35 mins from Hobart with breathtaking views of D'Entrecasteaux Channel, Bruny Island and Storm Bay. Overlooking small township with all conveniences and young farming families around. Please write or phone for more information. Priced \$14,800.

Peter & Carolyn Audet, PO Box 47, WOODBRIDGE 7162. Phone: 002-951-762.

DEADLINES: GR 36 – FEB 25TH, GR 37 – APRIL 29TH

FOR SALE: Two B/R cottage on 2¼ acres, 45 miles from Devonport. Part of the cottage is an old schoolhouse lined in Tasmanian oak, the remainder is solid but needs a few repairs and paint. There is ample fresh water, electricity, septic tank and inside toilet. School bus and telephone 50 yards away. The land is divided into paddocks with stable, feedshed, garage, sleepout, poultry yard and shed and goat yard and shed. Price \$16,500.

Lyndell Dunlop, 36 Main Street, SHEFFIELD 7306. Phone 004-911-556 or 004-911-671.

SHARE FOR SALE: Half share in 40 acres on the Walsh River 8 miles from Herberton, Qld. for \$16,500. The country is open forest with granite outcrops. Crown land on two sides and river frontage so plenty of permanent water. Included are comfortable cottage, vegie garden, approx. 40 young fruit trees, some ducks. There is no power but school bus is 2 miles away. We'd love a vegetarian couple or family whose wish is to live a simple life in harmony with the environment. Contact:

Rob & Tess Rodgers, C/- Post Office, HERBERTON 4872 or phone 070-956-424.

FOR SALE: At Tenterfield NSW, 360 acres of freehold land, relatively flat with good water from permanent creeks and one dam. Subdivided into 3 paddocks with one set of yards – boundary fences in good order. Property is only partially developed – very scenic and private. Power nearby. No Buildings. Price \$27,000 – some finance available. Contact:

Robin or Sharon Bull, 'Innisbrae', Woodside Road, Tenterfield 2372 or phone 067-3759 and ask for Line 9 between 6-9 week nights.

Seed Swap

I have been trying to buy open pollinated i.e. non hybrid sweetcorn. Phoenix Seeds and New Gippsland Seed Farm don't have any. Can anyone help? I have several varieties of seed such as salsify (white), Blue Lake climbing beans, peas (dwarf and climbing, sugar snap), sweet basil, etc. if someone wants to swap.

Nola Lean, PO Box 423, COWANDILLA 5033.

I need some Snow Peas or any of the following seeds: Midget Watermelon, Sweet Corn Squash, Virginia Tobacco, Mini-Round Carrot, Bush Potato Squash, Mini-Cauli, Green Sprouting Broccoli, Lettuce, Goldrush Zucchini, New Guinea Bean, Caperbush or Salad Small Fruited Tomato (Yellow pear Tomato).

I have the following seeds to swap: Melon Squash, Mixed Egg-plant, Borecole Spuit (a new type of Kale), Bok Choy, Chinese Cooking Melon, Salsify, Butternut Pumpkin, Phaseolus (Snail Vine Climber), Lourd Cress, Tetragonum, Pincushion, Dutchman's Pipe, Koelreuteria (Golden Raintree), Raging Corn Seed, Cantelope, Watermelon, Pumpkin, Tropical Cobra Melon, Dog Ears Lettuce, Chinese Spinach, Greek Winter Bean, Giant of Stuttgart Bean, Mammoth Golden Cluster (Butter Bean), Bush Bean, Early Horn Carrot, Curled Parsley, Red Cabbage, Sour Sops, Litchi, Amazon Custard Apple, Dwarf Beans, Sugarloaf and Cape Horn Cabbage, White onion, All-Seasons Carrot, Epicure Climbing Beans and herbs Dark Opal Basil and Sweet Basil.

Edward and Skye Bridges, Glen Martin Road, CLARENCE TOWN 2321.

Unclassifieds

FOR SALE: At Mount Evelyn, 3 B/R house on 2½ acres, renovated, large kitchen with slow combustion/electric stoves, beaut timber cupboards. Lounge has wood heater, blackwood panelling. Tiled bathroom with shower recess. Large vegie/herb garden, fruit and nut trees. Some bush. large workshop/garage. Power, water, phone, gas. Schools handy. If you wish to be self-sufficient but need to commute to Melbourne, this property is ideal. Price is \$58,500. Selling as we are moving to East Gippsland.

Wal and Audrey Porter, phone 03-736-3341.

FOR SALE: Unspoiled bushland on a rough bush track between Eden and Bombala in far SE of NSW. Handy to snowfields and beaches. No amenities, no RSL, no pollution: plenty of trees, birds, animals and peace. Ten acres to 100 acres – \$7,500 to \$35,000 – most with creek frontage. Some finance possible on large blocks. Previously advertised last April, re-subdivided to suit council requirements. For more details please ring 02-949-5132.

MAIL ORDER: Native plants; trees, shrubs, ground covers all well established in 75 mm 'grower' pots; \$1.30 each including rail freight within NSW (25¢ extra per plant, Qld and Vic). Minimum order 12 plants. Send SAE for list which includes flannel flowers, kangaroo paws (including new hybrids), grevilleas and selected forms of many others . . . all ready to be planted out.

Castlereagh Native Plants, R23 Wilchard Road, CASTLEREAGH 2750.

LAND WANTED: Approx 50-80 acres in Samaria/Swanpool (Vic) area, if possible, but will look anywhere in N/E Victoria south of Benalla. Suitable for vegetables, fruit trees and some animals. Water supply essential (under normal weather conditions). Preferably some bush and pasture or all pasture. No buildings needed. If you know of any land please write – all letters answered.

J. Ryan, 10 Lawson Street, BLACKBURN 3130.

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Steve LaValley, Botanic Ark Nursery, Copeland's Road, WARRAGUL 3820.

FOR SALE: On 80 acres, 4 B/R home in Whipstick area of northern Victoria. Fifty acres crop, 30 acres bush. Modern insulated Hardiplank home – BIR in 4 bedrooms. Standard size refrigerator, standard size cooker, instant hot water service all LP gas, 12 v power for lights and TV. Generator for washing machine, vacuum, etc. Established septic system, 5000 gal concrete tank, dam. Near school bus to Bendigo schools. Price \$47,500.

Write Leech, Box 46, EAGLEHAWK 3556. Ph: 054-361-389.

WANTED: A place of our own in a community near Newcastle. We (37, 12, 9 and 4 years female persons) are at last free to look for our piece of happiness in an environment of similarly minded people. I will be working in Newcastle but I am desperate for a GR environment for support, stimulus and sanity. Can anyone at least give us a few clues as to where to begin?

Nita, C/- Grass Roots, PO Box 900, SHEPPARTON 3630.

FOR SALE OR EXCHANGE: Eighteen acres, partly garden, partly bush, own hill-top, sweeping views, mountain setting. Two houses plus large entertainment barn with tearoom and ensuite, indoor garden, chandeliers and stained glass. Many possible uses: weddings, conventions, dances, camps, etc. Plus 3 holiday cabins, stables, donkeys, ducks, chickens, fruit trees gravitation water supply, own dam and creek connection. WIWO, complete with art work worth \$15,000. Full price \$145,000 ONO. Will exchange for similar property in NSW or Queensland. Contact owner:

A. Maharica, Mt. Margaret Road, MARYSVILLE or ring Angela on 057-747-211.

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'True Grist Barley Grain Beer' we guarantee 100% satisfaction and success in using our Home Stone Flour or Grist Mills to mill fresh barley grain grist for the best 'Home Grain Beer' in the world made at home!

Write for your local agent's address, and send two 27¢ stamps for our catalogue to Kevin and Bronwyn Rogers, Australian Retsel Distributors, PO Box 712, DANDENONG 3175, our office 16 Pinewood Avenue, NORTH DANDENONG, or telephone 03-795-2725.

HERBAL MEDICINE DIPLOMA COURSE FOR SALE: I began a correspondence course with a health school but am unable to continue with the course. It covers three main areas including anatomy, diagnosis and herbal medicine. When completed there is a Diploma in Herbal Medicine. There is no set time to complete the course and it is transferable. I have completed only one lesson. Original cost \$350 but I will transfer the course for \$250. All texts, lessons, etc. included. Contact:

S. Hurtado, 113 Charles Avenue, WHYALLA NORRIE 5608.

WANTED: Self-sufficient persons interested in caretaking and maintaining duties on a 55 acre block on Singleton Road, Colo Heights. There is a run-down shack, goats, small fruit trees, etc. We have our own business in Sydney and are able to live at the GR level only on odd weekends. This is an ideal opportunity for someone seeking an alternative lifestyle. We will help the successful applicant to get comfortably settled. Further particulars contact:

John and Fay Simpson, PO Box 219, AVALON 2107.

FOR SALE: Two B/R house with river frontage. Flood free, open fireplace, HW system, septic, town water, separate toilet, water to all paddocks, good fencing, 6 ft fence around ½ acre, 2 car garage, 2 room flat, aviary, gazebo, vegie garden, abundant wild life also platypus, on 2 acres. Separate deeds, leased next door unused stock route 4½ acres. \$20 per year. I run sheep and cattle. Perfect retirement – suit artist, writer. Park-like setting. Price \$48,000.

Jackie Francis, 'Amaroo', BENDEMEER 2352.

ART COURSE: If you have any art ability at all why not cash in on it? Learn to paint for exhibition and sale as well as pleasure. Self-contained art course teaches you to paint your own originals and not copy, also teaches you to criticise your own work. No gimmicks. For price and particulars send stamped addressed envelope to:

'Advertiser', 3 Snowy Mountains Highway, COOMA 2630.

PARTNER WANTED: Mature athletic permaculturist searching for a female partner to share a brick home and orchard at a beautiful beach.

Olli Vaartaja, 87 Bishop Road, BEACHMERE 4510. Phone at night 071-968-01.

HEALTHY, LOW CALORIE AND LOW COST DESSERTS: All calorie counted and most low cholesterol too. Use your homemade cottage cheese and yoghurt in these goodies. Send \$3.00 now for 25 nutritious recipes to:

Lesley King, PO Box 28 Wondai 4606. Post free.

SHARES AVAILABLE: These share are available in a nature farm. Each entitles ownership and management of 2 ha, one cleared, the other bush. Ecological principles must be followed.

O. Vaartaja, 87 Bishop Road, BEACHMERE 4510. Ph: 071-968-301.

FOR SALE: Northern Tasmania, Mt. Barrow road, 2 lots, 800 m (2400 ft) above sea level with beautiful view and north-easterly aspect.

(a) Internal, 16.73 ha (40 acres approx) with easy access to main road. Light bush, permanent spring water, power and phone available. Price \$9,000.

(b) Land, 11.70 ha (27 acres approx.) frontage on main government road. Light bush, permanent spring water, power and phone available. Price \$9,000.

Both lots only 48 km from GPO Launceston. Write to:

Mr. & Mrs. D. Sepek, 31 Rowan Av., Newstead 7250 or ring 003-319-273 (evenings).

Unclassifieds

There is a fee of \$5.00 for each Unclassified and we do appreciate it if you can limit your advertisement to 75 words. Please mark envelopes 'Unclassifieds' and forward payment with the advertisement.

FOR SALE: Thirty acres, 18 km N/W of Grafton on bitumen road. Half is cleared and remainder bush. We've built a stone house, and there are 3 dams, a spring-fed well, 216 three-year old citrus trees, fully irrigated plus tamarillos, paw-paws, bananas, custard apples, etc. All the orchard area is fenced and has been fertilised with chicken manure. Also there are 8 tons of fowl manure ready for use. Phone to be connected. We're asking \$38,000 ONO (cash please). Contact:

35 Kent Street, Grafton 2460 or phone 422-682.

DO-IT-YOURSELF WATER DRILLING: One person operated portable rigs capable of drilling a 4 in hole 200 ft down. Standard rig includes 3 hp petrol power unit, drill stems for 100 ft soft rock bit, harder rock bit, 4 in reamer, revert drillers, mud additive and instructions. You would need a water circulating pump 200 lb pressure preferred (like a fire-fighting pump). Total price is \$1685 plus freight. A community could buy a rig, put down their own holes, then hire their services to local farmers to recoup their initial outlay. Brochures and more details are available so if you are interested send a 10 in x 8 in (60¢/70¢) ssae to:

Water Search, 192 Hawkesbury Road, SPRINGWOOD 2777. Phone 047-541-413.

FOR SALE: S-E Queensland, 103 acres between Gympie and Maryborough. Picturesque level to steep country. Largely cleared. Fertile, well-drained soil. Suit smallcrops or plantation. Creek boundary. Backs onto national park. Good all-weather access road. One good dam, four others that are no good. Windmill and bore, well, pumps and tanks. MF65 tractor. Comfortable 14-year old 3 B/R W/B house, power, phone, septic, gas stove, new potbelly stove. Good 40 ft x 40 ft shed. Other outbuildings including 2 solid chook houses. Established organic vegetable garden. Primary school and pub 3 miles; small town 5 miles; large town 25 miles. Chooks, ducks and geese can stay. Price \$140,000.

Phone 071-293-187.

FOR SALE: One-eighteenth share in 600 acres on north coast NSW. Hilly, heavy rainfall area, good soil, permanent unpolluted creek. The share comprises a 24 ft x 30 ft one bedroom cottage with fireplace, wood stove with HWS. Telephone. Electricity 1 km. There is a 30 ft x 12 ft post and beam shed for fruitpacking, storage, chook pen or tools. Vegie patch, 50 fruit trees up to 5 years old, 75 Chinese gooseberries for cash income. Most area under irrigation - 2 km dirt road to school bus - 9 km to Bellingen. Price \$52,500.

Henry Maizonnier, Boggy Creek Road, THORA 2492. Phone 066-551-681.

We are planning to drive across to Perth from Sydney in August 1983 and would like to use the opportunity to speak with other GR readers and doers along the way. We will be fully independant and travelling in a VW micro-bus with our children Douglas (14), and Sallyanne (9). Our eldest son Mark (16) may not be with us. Please drop us a line or ring us if you would like us to visit you.

Bruce and Judith Prince, 9 Edna Street, Warrimoo 2775. Phone 047-536-616.

FIBRE FORUM is the quarterly magazine of the textile arts in Australia. Subscriptions in 1983 are \$16 overseas and may be paid in Australian or US dollars. Articles on all aspects of textile expression. Write to:

The Australian Forum of Textile Arts, PO Box 77, University of Queensland, ST. LUCIA 4067, Australia.

FOR SALE: Glenmaggie, Gippsland. Well-loved 2 B/R house, elevated with sundeck all round, giving superb views of lake and mountains. Wood-panelled throughout with exposed beams, open fire in lounge, gas cooking and hot water. Plenty of room underneath for carport, workshop, extensions. School buses close by. Reason for selling - we are moving to our farmlet to enjoy self-sufficient lifestyle. Asking \$26,000.

Joy Bakos, C/- Post Office GLENMAGGIE 3858. Ph. 482-826.

CANDLEMAKING EQUIPMENT FOR SALE: Sheets of beeswax, natural and coloured, paraffin wax, wick, stearine, moulds - metal, rubber and an extensive range of plastic ones, perfumes and powdered dyes. Also instruction sheets, books and a beginners kit (\$4.50 posted). Please send a stamped, self-addressed envelope for a price list. I would love to correspond with anyone interested in candlemaking.

Noelle Sporys, 89 Railway Parade, ELTHAM 3095.

DEADLINES: GR 36 - FEB 25TH, GR 37 - APRIL 29TH

WANTED: Farmhouse with approx 10-15 acres (more if the price is right). Electricity needed for freezers, but would not mind a wood stove. Permanent water a necessity. Northern NSW location. Would appreciate either vendor's finance on small deposit (\$5,000-\$6,000) or rent at first with option to buy. Need to be close to schools or school bus, primary basically and later secondary. Willing to tackle renovation to house providing we can live in it while we repair.

Write to Maureen and Mark C/- PO, BARYULGIL 2460 or phone on 066-472-130.

AUSTRALIAN BUSHHATS: Authentic pioneer style genuine hand-stitched leather hats, wide brims, are available from me, posted anywhere in Australia. Inquiries from individuals and interested shops welcome. For more details write:

M.B. Richards, C/- Post Office, IMBIL 4570.

FOR SALE: Newly renovated W/B home with S/C stove and solar hot water on 4 acres. Planted to 8,000 strawberry plants, 100 boysenberries, raspberries, olives, many fruit and nut trees and stock trees. Town and bore water with windmill and electric pump. Thriving 'drive-in' business situated on Princes Highway, close to beaches and Tuross river. May include poultry and breeding pig. Milking bail, sheds, etc. For private sale at \$68,000.

Christine & Graham Oke, 'Banksia Farm', BODALLA 2545. Phone 044-735-254.

LAND FOR SALE: In S/E Queensland, 10 acres of gently sloping land situated in the growing community of Lockyer Waters which is 1 1/4 hours drive S-W from Brisbane and in the agricultural area of Laidley/Gatton. Power and phone, bitumen road, good deep growing soil, semi-permanent creekbed ideal for dam, or bore possible. Fenced on three sides. Variety of shady gums. Price \$24,000.

Mary and Allan Pearce, 9 Playfair Street, TARRAGINDI 4121. Phone 07-392-1196.

HOUSE SWAP: The drought has forced us to come to Sydney to live and work for an indefinite period. We have a comfortable house of character on a 2000-acre property near Armidale. Would anybody like to swap a home in Sydney for our country home on a borrow basis. Plenty of land to grow vegies and keep cow, goat, horse, etc.

Ring 02-881-931.

FOR SALE: Natural food restaurant at Nelson Bay (one hour north of Newcastle NSW). Beautifully decorated in pine and cane, greenery and all equipment included. Seats 32 comfortably. Good business for enthusiastic couple - 8-year lease, rent \$654 per calender month. Reduced from \$45,000 to \$35,000. Write to:

The Bay Leaf Kitchen, 130 Magnus Street, NELSON BAY 2315, or phone 049-812-761.

INTERESTED IN EDGAR CAYCE?

He was known as the Sleeping Prophet and gave thousands of readings, which gave excellent help to many people, especially concerning health and the spiritual nature of man. These readings have produced much interest and there are over 100 books written on the many subjects which we are endeavouring to bring within reach of those interested. Please write for booklist to:

The Edgar Cayce Book Shop, PO Box 216, OCEAN GROVE 3226.

Unclassifieds

FOR SALE: Comfortable, friendly 3 B/R home on 1 acre in village 7 km from major provincial city offering all facilities. Slow combustion stove, electric stovette, 30 x 20 garage/workshop/office, chicken runs, orchard, ¼ acre of berries, herbs and vegetables, heaps of young trees and a deep well with electric pump. No toxic chemicals in 10 years (except Zero on fence lines). Phone, bus to primary and secondary schools. Rates about \$260 p.a. Wonderful climate, 2½ hours from Sydney, local work available. Price \$55,000.

G. & L. Carter, 17 Wellington Street, EGLINTON 2795. Phone 063-371-203 AH or 063-313-755 Ext. 10 BH.

FOR SALE: Northern NSW, just behind Mt. Warning. We have four pieces of beautiful bush for sale. One 16 acres, two ten acres each \$25,000 and one 100 acres \$52,000. They are not subdivided yet, hence the reasonable price. The smaller pieces each have fantastic homesites – 360° views, northerly aspect, up against beautiful state forest. Choice of steep or gentle bush. The 100 acres is perfect – every inch is dream quality. Please come and stay with us and study them.

Debbie and Jon Faulkner, Post Office, TYALGUM 2484.

SOUL MATE WANTED: Grass Roots-hearted lady who is also at a crossroads in life. At 47 I am more blessed with worldly goods (mainly a small property in the Adelaide hills) than youth. My ties are a teenage daughter (still at school), garden and assorted pets. My situation is not inflexible although that little Eden is begging to be completed. Is there someone reasonably placid, not over-fanatical who has a strong enough desire to make the 'break'?

Don, PO Box 80, EASTWOOD 5063.

HOUSE TO RENT ADELAIDE from mid-May for a year or longer. It has been recently renovated and is close to city and other amenities. It has a large block with big workshop, 3 phase power, chicken house, glasshouse and extensive vegie garden. The prospective tenant must like fruit trees, gardening and looking after chooks as we intend to leave everything as it is at the moment. Reference necessary. For further particulars write to:

Nola and Joseph, PO Box 423, COWANDILLA 5033.

WANTED TO RENT: Single male of 46 summers, educated, independent and self-sufficient, not into anything, communes, utopias, etc. would like to rent a small area – half acre or 50 sq metres with access to water. Room for caravan and vegie garden on a temporary or semi-permanent basis. Ideal place would be high ground, north NSW or Queensland, 10 km maximum from the sea, not too isolated, but anything considered. Eventual help offered for free. A female 35 maximum, single, if interested, please write.

J. Gewis, C/- Poste Restante, Central Post Office, Martin Place, SYDNEY 2000.

FOR SALE: On main Boort to Kerang Road, 4 acres, nice home consisting of 3 B/R, lounge, kitchen, closed-in verandah. Large dam and rainwater tank. SEC, septic tank, combustion stove, carport, machinery shed, workshop, goat and chicken pens well fenced. Diesel tractor, cultivator and saw bench, etc. Established vegetable garden, young fruit trees and vines. Daily mail delivery. School bus at gate. Sell fully furnished including deep freeze, refrigerator, etc. Price \$42,000.

Robert and Elsie Smith, RSD 13, BOORT 3537.

FARM TREES: Grow your own from seed – it's simple and inexpensive. Seed of trees suitable for windbreaks, shade, honey flora, bird attraction, farm timber, fuel and supplementary stock fodder. Send ssae for a catalogue.

Special Purpose Flora, P.O. Box 302, GISBORNE 3437.

LAND FOR SALE: At Alexandra, 2 acres, 3 B/R W/B cottage with bungalow, garage, hay shed, chook sheds and yards. Also orchard, garden and shrubs. Close to shops, schools and with SEC, telephone, town water connected. Lovely quiet spot fronting onto creek and crown land. House needs renovating and fences need repairing but good paddocks. 'Mudbrick' neighbours. Genuine sale, owned by pensioners of ill health. Will sell for \$29,000 ONO. Enquiries:

M. Creighton, 134 Eliza Street, SEYMOUR 3660. Ph. 057-922-889.

LAND FOR SALE: 75 acres at Labertouche (W. Gippsland). Ten acre lake, 15-20 acres bush, remainder long, lush grass. Two dams, hayshed, lock-up shed, 2 B/R mudbrick building almost finished. Approximately 50 assorted fruit trees and berries have been planted on rich, red soil hilltop. Also 130 nut trees including hazelnuts, chestnuts, almonds, walnuts stone pines, pistachios, pecans and macadamias. Rainfall 40-50 in per year. Primary school just around the corner, 90 km from Melbourne. Price \$120,000. Write to:

Jack and Rona Pettigrew, Alcorn Road, LABERTOUCHE 3816 or phone Jack at work on 03-341-7016.

LAND FOR SALE: Regretfully, due to family situation. New England district, Glen Innes and Guyra area, unit trust of ten unitholders. Consists of large private acreages, with extensive community acreage. Price \$10,000. For full details please write giving some personal information and aspirations, expectations, etc. Acceptance by other unit holders is required.

Post Office Box 715, FRANKSTON 3199.

NEW DAIRY HEALTH DRINK: Compared with milk it has less cholesterol, less fat, less calories. It is hypo-allergenic (less allergic reaction for milk-sensitive people). It creates less mucous, costs less, tastes great, keeps mixed for 2 weeks in the fridge, keeps for 5-10 years in the dry packet, does not settle like powdered milk, is made principally from sweet dairy whey. We are looking for distributors in all districts and also customers. For sample pack and information send \$4.00 to:

Cosmic Enterprises, 192 Hawkesbury Road, SPRINGWOOD 2777, phone 047-541-413 or Torsten Bazoche, Box A710, SYDNEY SOUTH 2000, phone 02-331-7304 AH.

FOR SALE: Five acres surrounded by state forest in a temperate rainforest valley, with abundant wildlife and bordered on two sides by two rivers, near Erinunderra, East Gippsland. It has school bus route and sealed road nearby. Building permit OK. Ten minutes drive to general store, 30 minutes to Cann River. It is cleared, nearly flat, good soil and could accommodate two families. We are asking \$10,500. Contact:

M.P. Wilson, 7 Meander Road, HURSTBRIDGE 3099. Phone 03-718-2225.

FOR SALE: In the Kyogle district north coast NSW, 125 acres of land particularly suited to multiple occupancy. About one-third cleared, rest light bush through to rainforest. There is an old 5 B/R home (quite livable), creek frontage, several small plateaus for homesites, council OK for hamlet development. Situated in a very picturesque valley at the base of Mt. Ida.

Phone 066-851-335.

FOR SALE: 50.586 ha (129 acres) leasehold in process of conversion to freehold. On Severn river, 7 miles west of Ballandean in granite belt. This land is relatively secluded and undeveloped. Potential exists for small commercial orchard or vineyard and cash vegie crop. Two incomplete dwellings, one part stone, octagonal, is very comfortable. Slow combustion stove, kero fridge, etc. also sound one-roomed cabin and brick house (shell) overlooking river and hills. Price \$20,000. For further information please contact:

Kate Devoy, M/S 214A BALLANDEAN 4382.

HERBAL REMEDIES: Dried herbs in capsule form 100% pure no additives. Asthma Combination \$6.40/100, Liver Mixture \$8.00/100, Kidney Combination \$6.15/100, Sinus Combination \$7.15/100, Varicose Veins/Haemorrhoids Treatment \$5.60/100, Glandular Toner \$6.35/100, Lower Bowel mix for Constipation \$8.50/100, for Diarrhoea \$4.80/100, Broad Spectrum Female Correctant (supplies natural estrogen) \$6.95/100, Sex Rejuvenation Combination \$10.80/100, Skinny Formular \$9.00/100, Thyroid Mixture \$6.50/100, Infection Fighter \$7.30/100, Herpes Treatment \$4.55/100, Parasite/Worms Mix \$8.55/100. Many more available. Please send \$1.00 for catalogue. Please add 60¢ freight per bottle.

Cosmic Enterprises, 192 Hawkesbury Road, SPRINGWOOD 2777. Phone 047-541-413.

Unclassifieds

There is a fee of \$5.00 for each Unclassified and we do appreciate it if you can limit your advertisement to 75 words. Please mark envelopes 'Unclassifieds' and forward payment with the advertisement.

TO SHARE: We are looking for a couple/person to share our house on five acres at Richmond NSW (8 km out of North Richmond). We would be asking about \$45 per week for own bedroom and shared kitchen/dining/living and bathroom. Are there any GR people interested?

David and Ann, 'Binya', Lot 114, Tennyson Road, TENNYSON 2754 or phone 045-765-458.

FOR SALE: In Winnaleah, a north-east country town of Tasmania, a 3 B/R W/B house with concrete block shop on a quarter of an acre. Shop currently let at \$100 per month, rates \$149 per year. Within walking distance of high school, self-service grocery store, post office, bank and garage. Only genuine buyers need apply. Price \$29,000.

P.F. Pinkard, PO Box 6, WINNALEAH 7254. Ph. 003-542-173.
FOR SALE: Cottage on one acre in small village, 4 miles from Deloraine, Tasmania. Open plan lounge, dining/kitchen with pine lining, open fire, 3 B/R, sunroom, all conveniences, outside workshop, pig pen, chook shed, good flat ground with high hedges and school bus route. Must sell immediately. Price \$17,000. Write to:

Ian Colvin, 24 Cottesloe St., LINDISFARNE 7015. Ph. 002-437-212.
WANTED: We are collectively developing 1500 acres of partially cleared land on the Shoalhaven River. The property has permanent water, phone and mains electricity. We are looking for practical energetic people to help achieve the full potential of this land and the community we intend to build there.

Tom McHugh, 48 Henderson Street, QUEANBEYAN 2620. Phone 062-975-826.

DEADLINES: GR 36 - FEB 25TH, GR 37 - APRIL 29TH

HOMOEOPATHIC FIRST AID KITS: The kit contains 14 proven emergency remedies. Instructions for use. Price \$42 plus postage. Postal advice C/- Tara Homoeopathic Centre, 6 Wood Street, NUNAWADING 3131, phone 03-877-5669.

WANTED: A family of animals and never been married 41-year old female is seeking a mate (male or female) to share expenses and work organically 10 acres of fertile soil close to the sea in the Western District of Victoria. No deep spiritual codes, just a deep love and respect for all living things - must be adaptable to wind and the ups and downs of a conservative, conservationist cyclist. Write to:

'Sharing', PO Box 24, EAST MELBOURNE 3002.

FOR PRIVATE SALE in New England. 400 acres (160 ha) perfect bush retreat, with abundant wildlife, including deer. Valuable timber, such as box, ironbark and stringybark. Good building sites with views. Water no problem and ample rocks for building. Suitable areas for home gardens and fruit trees. Situated on sealed road with school bus, 23 km from Glen Innes. Reasonably priced at \$56,000.

Phone 067-347-372 evenings.

FOR SALE: Partly wooded, mainly arable property backing onto Great Divide in Mid NSW. Abundant wild life, ideal house site. One dam, 2 tanks, 2 sheds with basic facilities, slow combustion stove, kero fridge, battery bank and solar collector. Two-year old fruit trees of various types and ornamentals, herbs and vines. Six young fowls. Quantity of building materials included in price. Building stone on property. Suit young enthusiastic couple. Approx. 40 km from town. Price \$22,000 negotiable.

RSD 3110, HUONVILLE 7109.

SACHET, POTPOURRI, INCENSE MATERIALS: Lavender flowers, rose petals, naturally sun-dried retaining maximum natural fragrance and colour, delightfully fragrant sandalwood powder - \$10/¼ kg, \$19/½ kg and \$35/kg post paid - mixed lots possible. Gum benzoin - \$2/25 gm, sandalwood oil \$4.50/8 gm - postpaid. I am about to expand my range of sachet, potpourri materials and would like to hear from GR readers as to what they need - no obligation.

Peter Hunt, PO Box 148G, PASCOE VALE SOUTH 3044. Phone 03-386-2107, 9.30 a.m. to 9.30 p.m.

LAND FOR SALE: Sunshine Coast and hinterland.

Dear People, thanks for your enquiries following my last ads. We have at present (October 82) acres ranging from \$21,500 up. Generally the rule is the closer the coast, the more expensive. Most have permanent water of some sort. There is even the lease of an island available for \$16,000 plus \$60 p.a! As in the past I shall do my utmost to help those seeking a home in this area. It's a lovely place to live! contact:

Sandra Dibbs, Sunrise Realty, 29a Howard St., NAMBOUR 4560. Phone 071-411-900 or AH 071-421-732.

BELLINGEN LAND FOR SALE: 37 ha peaceful bushland, 7 km from town adjacent to Kalang River, bitumen road. Large dam, cleared house site, plans approved by Shire. Many communities in area. Price \$52,500. Consider exchange smaller block with cash adjustment. Contact: Appleby & Clarke, MS 316, NEEDIE via GYMPIE 4570.

LAND FOR SALE: Shares in 800 acres with rich soil and high rainfall at Larnook, 12 km from Nimbin. You get a deed to your private area of two acres and a share in 550 acres of community lands. Prices range from \$5,600 to \$7,000 and include all-weather internal roads, irrigation water piped to your area, wildlife reserve and reforestation areas. We wish to live in cooperation with nature and people. If you are interested please contact:

Joy Wilson, Secretary, The Billen Cliffs Unit Trust, NIMBIN 2480, phone 066-337-147 or 066-891-388.

FULL BOARD OFFERED for young person interested in learning all aspects of horticulture in return for running part-time business. Prefer non smoker, drinker, no drugs, and hold a current vehicle licence. Casual work in garden maintenance available locally. Extensive reference library. At present research on dripper irrigation for home gardens in progress - to date very successful. Large vegetable plot. Plenty of interesting hard work.

George Hall, 10 Queen Street, AVENEL 3664.

ALMONDS DIRECT FROM GROWERS: We will supply 8 kg of first grade almond kernels for \$45 post free anywhere in Australia if payment made with order. Sorry, no smaller quantities possible because postage then too expensive. Remember - a handful of almonds contains as much protein as a steak! Please write to:

A.F. & U.R. Stehlik, Orchardists, Box 234, WILLUNGA 5172.

ORPLID VEGETARIAN HOST FARM: Orplid (opened early 1981) is a unique host farm offering guests a new experience and set on a picturesque property of seven acres, some bush, with its own shoreline, overlooking the Tamar River and Batman Bridge.

Orplid features a totally vegetarian, whole-food cuisine in quiet surroundings where you can relax and regain lost energy. There is an opportunity to learn the rudiments of a wholistic lifestyle based upon organic gardening principles. Naturally our environment is free of alcohol and tobacco. Please contact hosts Dr. D. & I. Gehrman at:

Orplid Health Resort Pty. Ltd., RSD 336, BEACONSFIELD 7251. Phone 003-947-174.

DRAUGHT HORSE FOR SALE: Due to insufficient pasture we are reluctantly selling our 2-year old dark bay draught filly. She has four white socks and white blaze on her face. Both parents are keen workers. She is halter-broken and quiet - ideal for farm or cart work. Contact:

Wayne and Libby Hudson, C/- Post Office, STOWPORT 7321 or phone 004-316-240.

WANTED: A friend and I own 620 ha of bushland with a mudbrick house under construction. I am in my late thirties, survived an awful marriage and have been alone for eight years. Is there a lady, mid-twenties to mid-thirties, of Zennish turn of mind with her own creative energies and clarity about what she wants from living and loving. I value warmth, openness and honesty and seek a response from a like-minded lady interested in the good life.

Michael O'Brien 'Sharewater', PO Box 126, BRAIDWOOD 2622.

Unclassifieds

FOR SALE: Gourd seeds, organically grown – 25 for \$2.50: S. African giants, African wine kettles and bottles, Rhodesian spheres and bowls, Mexican waterjugs, Corsican tobacco box, US canteens, Inca giants, Nigerian mammoths, small/large birdhouse gourds, US short/long dippers, Japanese saki bottles, Hopi grain containers, bushell baskets, Hercules club, marbled snakes, Indian sitar gourds, Indonesian bottles, penguins, siphon, flutes, malabar, Israeli bottles and many others. Also for sale cured and dried gourds, dyed, painted, caned, waxed. Send sae for lists.

Gypsy Jessop, RSD Bonang Highway, GOONERAH 3888.

COMMUNITY, ALTERNATIVE AWARENESS and the New Age are themes dealt with in novel and symbolic form through the story *Citiplex*. The plot of this tale was not so much thought up as discovered in a prolonged group situation. The action takes readers from Sydney to revolutionary Iran, Istanbul and the Findhorn community in northern Scotland. Author Paul Rigby has published the book himself, available post-paid for \$7.00 from:

Christel Communications, 47 Manor Road, HORNSBY 2077.

TASMANIAN PROPERTY FOR SALE: 242 acres comprised in 2 titles. Situated at picturesque Golden Valley on the Lake Highway, 12 miles south of Deloraine, 45 minutes drive from Launceston or Devonport. School bus to front gate. Mail deliveries 3 days per week. Country is undulating with excellent views. Northerly aspect. Approx half sown to pasture – balance natural bushland (tall trees, beautiful ferns, etc). Adequate fencing. Subdivided into 7 paddocks – water to each.

Homestead is W/B in A1 condition. Three B/R, kitchen, dinette, lounge, bathroom and laundry. Insulated throughout. Woodstove, electric range, Convair heater. Recently rewired and replumbed. Farm improvements include shearing, machinery and utility sheds, dry store, stock yards and ramp. Three permanent streams, one supplying home, garden, etc. Other permanent springs – gravity irrigation potential.

This property is potentially good for any farming activity e.g. dairying, wool, and/or lamb production, cropping, market gardening, horses, goats, etc. The price we are seeking is in the vicinity of \$350 per acre (say \$84,000) but the price is negotiable. All offers will be considered. Please contact:

Val or Trevor Harrison, RSD 950, GOLDEN VALLEY 7304 or phone 003-695-128.

NURSERY FOR SALE: Central Vic. 60 km Melbourne. Beautiful location surrounded by huge trees. Approx 2 acres. Main road frontage with good passing trade. Three large well-built glasshouses, sheds. Comfortable S B/R house, charming garden. Established reputation in herbs, ornamentals, fruit and nuts, and ferns. Business plus freehold \$120,000. SAV.

Tanderra Nursery, Main Road, MT. MACEDON 3441. Phone 054-261-562.

FOR SALE: A little bit of paradise – 80 acre farm with old-fashioned house but with power, phone, water and septic toilet. Set in a beautiful secluded sheltered valley surrounded by state forest, but close to historic NE Tasmanian town. About half the land cleared, valuable timber remaining. Also sheds, permanent water, small orchard, etc. Price \$26,000. Also 11 acres adjoining \$5,000.

John Summerhayes, WINNALEAH 7254. Ph. 003-542-229 or 003-532-160.

GEESE WANTED: I am very keen to obtain a trio of Chinese geese. Please contact:

Maxine Dawson, PO Box 25, LEMNOS 3631 (near Shepparton).

FOR SALE: Seven acre farmlet at Elands, west of Port Macquarie. Magnificent mountain and rural views. Good semi-volcanic soil. Elevated, fenced building site with power provided. Mostly cleared except for shade trees, but surrounded by timbered country. Small creek at rear; 6 km to school and shop. Price \$19,400. Adjoining 26 acre farmlet also available for \$25,000.

'Elands', PO Box 578, TAREE 2430.

SHARES FOR SALE in 26 hectares. Shareholders are committed to accepting responsibility for their lives, their personal growth and the mutual support of each other. The property will be managed in an ecologically sound manner by a shareholder owned company where each shareholder will be entitled to private use of a portion of land and have access to all communal land and facilities. Situated near to Nimbin township, it will accommodate 26 adults and children. Share price to be \$2,500 per individual. Contact:

John or Irene Herington (066-891-287) or write C/- Post Office, NIMBIN 2484.

A NEW PAPERBACK: Direct from the author/publisher, *The Lost Philosophy of Love* by Roy Victor Love. Some comments received are, 'This book is what the title suggests'. 'It gives good vibes and a lot of information for a small book.' Print your name and address clearly on a separate paper. Price \$4 plus 70¢ postage (surface Aust., NZ). Free surface postage for 4 or multiples of 4. It weighs 100 g plus the envelope.

Love Publications, 43 Didcot Street, KURABY 4112.

LAND WANTED: In Northern Rivers area of NSW we are looking for a minimum of 2 ha with water available, preferably a permanent stream, part rainforest, part cleared, with no house. Electricity not essential. We can afford \$12,000 to \$16,000. Please write to:

D. Hine, 1 Kamo Court, Ashmore, Southport 4215.

BOOKS FOR SALE: We specialise in new books on small farming and self-sufficiency topics and horses, harness and horsedrawn vehicles. Book lists currently available – Alternative Power Systems; Horses and Horsedrawn Vehicles; Crafts and Useful Skills; Building and Construction (for the Do-It-Yourselfer); Animals and their Care; Gardening and Green Things; Cooking and Kitchen Crafts. Send SSAE for list of your choice to:

Jenny & Martin Fawbert, Hobbybooks, PO Box 62, ROUND CORNER 2154.

FOR SALE AT KATOOMBA: Large 80-year old house with work to be done. It has been totally rewired, has near-new kitchen, 4 bedrooms, 2 sunrooms, one huge 20 ft x 24 ft lounge with larger than average potbelly stove. Fenced block with established fruit trees. Walk to everything. Could be good starting-point for 2 young families wanting to escape the rat race – possibility of some part-time work also. Price \$45,000. Reply:

'Advertiser', 66 Lovel Street, KATOOMBA 2780. Ph. 047-823-601.

MANURE FOR SALE: In 44 gal drums with press-on lids, delivered and emptied where required. From handfed racehorses, virtually weed free, has some urine-soaked wood shavings but mostly manure (definitely no straw). When composted it is excellent fertiliser/mulch, rich in nutrients because of horses' special diet. Delivery Sydney metrop. area only, maximum price \$6.00 per drum, minimum 3 drums. Ring 703-806 after 4 p.m. weekdays, anytime weekends. Mention *Grass Roots*.

FOR SALE: Between Gympie and Maryborough, 150 acres freehold. Approx 100 acres cleared, rest natural scrub. Frost-free, mostly hilly, magnificent views, good access, backs onto National Park. Good soil, suitable grazing, tropical fruit and macadamia nuts, some established trees. Permanent water, five large dams, natural spring. Old house, phone, power. Close to primary school and high school bus. Large shed, several small sheds. Price \$120,000.

H. & E. Jacobs, 'Oceanview', Bauple M/S 221, MARYBOROUGH 4650. Phone 071-292-214 or 057-931-472.

TASMANIA: Attractive, well-designed 2-storey house on 48 picturesque acres – 25 acres pasture, good soil suitable for market gardening, with permanent water. Outstanding views, peaceful location but on sealed road, convenient to Launceston and Devonport. All amenities to house and large workshop. Lean-to glasshouse, good established vegie garden, small berry patch and young fruit trees. Price \$46,000. Write to:

RSD 354, Weetah, DELORAIN 7304, phone 003-622-896.

INFORMATION WANTED: Can anyone kindly assist me with any information regarding the purchase of certain parts and accessories to suit a Ransomes MG6 tractor?

Charles Banfield, Box 5, STRAHAN 7468.

Information Available

When contacting groups, associations or newsletters listed in Information Available, please, out of courtesy, include an S.A.E., and mention that you heard about them in Grass Roots.

METAMORPHOSIS — recycled materials in craft.

Metamorphosis is a change of shape, a transformation. This book takes *Metamorphosis* as its title, a symbol for the imaginative use of materials in ways other than their original or intended purpose. Why look to recycled materials in craft? The most obvious reason is economic. Many more people need creative activities to fill increasing leisure, often on decreasing incomes. These activities must not be merely time-fillers, but lead to self-fulfillment. A necklace of gold, or of used electronic parts, springs from the same human urge to create

This practical little book (98 pages) is divided into six sections — wall adornments, body adornments, creative papermaking, fabric transformation by tie-dyeing and batik, puppets, and low-fired pottery, all backed up by several pages of follow-on reading.

Metamorphosis is produced by the Crafts Council of ACT Inc., and is priced at \$5.00 plus 70¢ postage.

Crafts Council of ACT Inc.,
1 Aspal Street,
WATSON 2602.

INSTRUCTIONS FOR ERECTING NESTING BOXES FOR DUCKS

The erection of artificial nesting sites for wild duck encourages nesting and provides protection for the eggs and the brooding birds in areas where natural sites have been destroyed.

This sheet will interest all those with waterholes on their land. Full instructions are provided for making a simple, draught-proof, wooden nesting box. There are also details for modifying iron drums, however, they are not as effective as wooden boxes for nesting sites and rust out quickly. Pointers for positioning the box and drum are also given.

Available free of charge from:

Fisheries and Wildlife Division,
Ministry for Conservation, Victoria,
250 Victoria Parade,
EAST MELBOURNE 3002.

RAINWATER TANKS — their selection, use and maintenance.

Because South Australia is the driest state in Australia, the government of that state has produced a small booklet on rainwater tanks to encourage and aid people who may be considering purchasing one. The booklet combines excellent general information on selecting, using and caring for a tank, together with a series of graphs relevant only to SA which are used for calculating the size of the tank required. The general information will prove helpful to anyone buying or building a rainwater tank. Available free of charge from:

The Public Relations Branch,
E & WS Department,
GPO Box 1751,
ADELAIDE 5001.

BETTER WAYS WITH WASTE

This booklet is a transcript of a meeting held in Lesmurdie, WA, in August 1979. Earlier that year people living in the Perth metropolitan area had suddenly become aware that the disposal of rubbish was not going to be as easy or as cheap as it had been in the past. Rubbish tips were filling up at a faster rate than expected. Suitable land for filling was becoming scarce and expensive. The practice of filling what had previously been considered worthless swamps was now seen to be environmentally undesirable. Matters came to a head when inner metropolitan local authorities, caught without room to tip their wastes, attempted to use sites which local residents, environmentalists and the public at large considered unsuitable.

Professor F.E. Bruce, the guest speaker brought a wide, up-to-date knowledge of the problems and possibilities to the meeting. He was a Reader in Public Health Engineering at the Imperial College of Science

and Technology, London, and a past president of the Institution of Public Health Engineers. Subjects covered by Professor Bruce included political action, markets for waste, collection for recycling, industrial waste exchange systems, heat value of refuse, direct salvage of unwanted items and more.

Better Ways with Waste is stimulating reading for those concerned about waste on both a national and local level. Price is \$2.00 plus 80¢ postage from:

Barrie Oldfield,
3 Over Avenue,
LESMURDIE 6076.

Since reviewing this publication Barrie has written to say it is now out of print but, if sufficient people are interested he can arrange a reprint. Perhaps interested folk could write and place an order with Barrie before sending money.

DISABLED GARDENER'S ASSOCIATION NEWSLETTER, PERTH

Gardening is better than sitting doing nothing, lessens the stress of modern living, provides a relationship with natural things, is good occupational therapy, and is rewarding, particularly when able to look after something depending on you for a change.

This newsletter is aimed solely at WA people, however interstate folk interested in setting up a similar group may gain ideas from it.

As well as publishing the small newsletter, the Association runs a library, a tool-pool and a task-force, that is, a number of individuals and community groups willing to provide an extra hand with heavy work or help provide transport to and from meetings and other association activities. Membership (including newsletter) \$5.00 per year.

The Secretary,
6 Spring Road,
ROLEYSTONE 6111.

SPECIALISTS IN UNUSUAL, USEFUL PLANTS

The Botanic Ark Nursery was opened in early 1982 by regular *Grass Roots* reader, Steve La Valley, and is dedicated to the collection, preservation and propagation of unusual, useful plants and the spread of information about them. Steve has a growing selection of difficult to obtain plants and trees, however they will *not* be mailed or railed, so must be collected personally. He offers a number of unique services including acting as a source for anyone seeking a little botanical advice or information. Although free of charge, please include a sae. For brochure please send sae to:

The Botanic Ark,
Cnr Sutton & Copeland Roads,
WARRAGUL 3820.
Ph: 056-235-268.

Open Sundays or by appointment.

HERITAGE AUSTRALIA

This is the first issue of the Australian Council of National Trusts new magazine.

Just as the 70s saw an awakening of interest in the environment, the 80s are demanding that we achieve a more rational balance between development and conservation.

In this and future editions we hope to provide concerned Australians with lively articles about the nation's heritage, built and natural and to provide a forum for the serious debate of such environmental issues.

This and the second edition are available by subscription only for \$10 from:

Australian Council of National Trusts,
PO Box 1002,
Civic Square,
ACT 2608.

Information Available

LEATHERWORK AND CERAMICS COURSES

Bendigo Technical College is one of the colleges of Victoria selected to run Certificates of Applied Art courses. At present Bendigo offers courses in Ceramics and Leatherwork. These areas of study are significant growth areas linked to the increased numbers participating in the crafts. Self development and income supplementing are the two most significant reasons for the growing participation of all types of people in the crafts.

Bendigo Technical College,
P.O. Box 170,
BENDIGO 3550.

QUANDONG

This is the newsletter of the West Australian Nut and Tree Crop Association, and contains details of forthcoming Association meetings, talks, field trips, reprinted short articles from world-wide sources, book reviews, members comments and queries, and notes on sources of trees, seed and grafting material. All subscribers are members and the current sub rate is \$15.00 per calendar year.

The Secretary,
WA Nut and Tree Crop Association,
PO Box 27,
SUBIACO 6008.

JOJOBA

An interesting sheet is available on this fascinating shrub, free of charge from the CSIRO Information Services. The sheet looks at the background to the jojobas sudden popularity, its uses, cultivation techniques and suggests potential growing areas. Detailed instructions are provided for organising a trial plantation under the headings of direct seeding, nursery propagation and establishment in the field. Finally, there are several books and magazines listed for further reading and a number of Australian seed sources. Jojoba, Sheet No. 34-1 is available free of charge from:

CSIRO Information Service,
P.O. Box 89,
EAST MELBOURNE 3002.

AUSTRALIAN HEALTH AND ENVIRONMENT

A journal of health and safety.

The first issue of this bi-monthly magazine has just been published and deals with the impact of lifestyle, environment and technology on human health. The magazine explores subjects like diet, smoking, alcohol, pesticides, pollution, drugs, occupational health and consumer product safety and other related subjects, presented in a non-specialist style that reaches a broad cross section of the community. Subscription is \$15.00 for six issues.

Australian Health and Environment,
P.O. Box 227,
EVERTON PARK 4053.

BOOKS FOR CHILDREN — a select list

This is the eighth edition of this popular list published by the Victorian branch of the Children's Book Council of Australia. It is a carefully chosen list and an excellent guide for parents and adults choosing books for children. The selection is limited to imaginative literature — fiction, poetry, and traditional folk tales, myths and legends. Each section is prefaced by a brief explanatory introduction, each entry accompanied by a brief description. The whole layout of *Books for Children* is designed to guide and help eager adults onto the right path for choosing reading material for their children. Although published by the Victorian branch, the list contains publishers and books available Australia wide.

Price is \$2.60 (including post and packing) from:

Victorian Branch CBCA,
Box 2428V,
GPO MELBOURNE 3001.

HOMEBIRTH — your right to choose

If you are considering a home birth and would like to know if it is legal, how much it will cost or just what the advantages are, you can contact us for support and advice. Enclose a SAE please.

Midwifery Contact Centre,
1A Shoalwater Road,
SHOALWATER 6169.

HOME BIRTH GROUPS

New South Wales:	Homebirth Association Sydney 9 Bromorrough Road ROSEVILLE 2069.
Queensland:	Sunshine Coast Homebirth Assoc. Box 151, TEWANTIN 4565.
Victoria:	Homebirth Group Melbourne Box 2 NORTHCOTE 3070.
Northern Territory:	Homebirth Darwin 35 Crisp Street, RAPID CREEK 5792.
South Australia:	Rosemary Smart 8 Bellevue Road FLAGSTAFF HILL 5159.
Western Australia:	Henny Ligtermoet Homebirth Aust. National Co-ordinator 1A Shoalwater Road SHOALWATER 6169.
Tasmania:	Sue Roper Lone Star GOLCONDA 7254.
New Zealand:	Berin Fitzsimmons New Zealand Homebirth Assoc. 3 Hendon Avenue AUCKLAND 3 N.Z.

FIBRE FACTS . . . for Spinners and Weavers

A small book (92 pages) of woolcraft hints, this is the brainchild of some of the members of the 1982 Wellington (NZ) Wool Festival Committee. Areas covered include care of wheels and equipment, carding, washing wool, spinning wool and other fibres, dyeing, knitting, making up garments, weaving, soapmaking, and feltmaking. A fascinating 'Grass Roots' type of book comprised totally of members handy hints. Available in Australia for \$7.50 plus \$1.00 post and packing from:

The Wool Shoppe,
PO Box 43,
YASS 2582.

RENEWING OF THE DREAMING

A group concerned with the cultivation of 'Aboriginal' consciousness of the environment, and in re-establishing loving awareness of and human contact with the powers of nature in areas where the traditional Aboriginal way of life and consciousness has disappeared. Weekend camps and meditations are held, with weekly meetings in capital cities. Weekly Sunset Meditations

Brisbane: contact Ian Cameron 07-370-1218
Sydney: contact Ursula Pitt 02-357-5394
Blue Mountains: contact Anne Fell 047-542-296
Canberra: contact Pat Williams 062-497-086
Melbourne: contact Margarita Gemmell 03-872-971
Adelaide: contact John or Brigitte Gillett 08-294-6732.

MAKING IT: a business guide for craftsmen reviewed in issue No. 34 is available from the Crafts Resource Production, 100 George Street, The Rocks, SYDNEY 2000, and not 27 King Street, as listed.

Book Reviews

SUCCESS WITH SMALL FOOD GARDENS — Louise Riotte. RRP \$9.95. Soft cover, 189 pages, USA.

This book has been written for those with limited space be it a suburban backyard or a few tubs on the balcony of an upstairs flat or beside the caravan.

One of the keys to using an area as effectively as possible is planning, and this is covered in some detail. Planning is examined not only for maximum use of space; other factors such as adequate drainage, sunlight and appearance are also taken into account. The author then moves into the actual garden itself, looking at techniques for maximising production – succession cropping, intercropping, trellising, terracing and the like, types and varieties of vegetables to grow, growing from seed, watering systems, soil fertility, and growing flowers and trees.

The book is well set out with drawings to illustrate specific points and tables which summarise and set out in an easily referable form cultural information for many vegies and herbs. Also covered in table form are composition of various sources of nutrients and organic matter, pH preferences of plants, and the like. A particularly fascinating chapter in the book is that on growing edible flowers – chamomile, clover, daisy, dandelion, geranium, lavender, marigold, nasturtium, pansy, rose, sunflower, violet and more. Recipes are included and cover such varied delights as flower butter, flower soup and flower wine.

The myriad of ideas and hints combined with sound standard gardening information makes this an ideal book for both those with limited gardening space or with a large garden where time and water are at a premium.

GROWING AND COOKING BERRIES — Mary W. Cornog. RRP \$9.95. Soft cover, 141 pages, USA.

There are many different types of berries which are easy to grow, require little space and bear fruit within several years of planting. They are therefore ideally suited to suburban gardens and gardens in the initial stages of development. The one main drawback with this fruit is perishability so for a year round supply of your favourite berries a suitable preserving method must be employed.

The second section of the book deals with the produce and how to use it. Information is provided on the various methods of preserving and a wide variety of recipes for breads, drinks, pies, cakes, desserts, jams, whilst subsequent ones take each berry individually and look at such areas as selecting varieties, special requirements, pruning, propagating, harvesting and potential problems. The approach to pest and disease control is unorganic, however, numerous organic methods are suggested and readers could adapt their own where required.

The second section of the book deals with the produce and how to use it. Information is provided on the various methods of preserving and wide variety of recipes for breads, drinks, pies, cakes, desserts, jams, jellies, relishes and vinegar are given. While most of the recipes sound really scrumptious closer inspection of ingredients reveals large amounts of sugar in most of them. Creative cooks could modify or eliminate much of it. I was rather taken by the idea of elderberry blossom fritters, baked blueberry pasties and elderberry grunt!

Growing and Cooking Berries is an attractively produced book with many informative black and white drawings. If you have considered berry growing but not quite got around to it, this may be the catalyst for you. The horticultural information is comprehensive and well written – do not be lulled into buying the book for the recipes alone, however delicious they sound!

A PATTERN OF HERBS — Meg Rutherford. RRP \$8.95. Soft cover, 150 pages, UK.

This delightfully illustrated herbal provides you with the information to identify, cultivate and use forty of the most common herbs, from angelica through to caraway, lovage, rosemary, stinging nettle and violets. The collection of herbs were selected for their usefulness in beverages, cooking and medicines; the focus of the book is how to use them to best advantage in your kitchen and for your health.

Identification of herbs can be very difficult for the beginner as there are numerous varieties containing close look-alikes. Names, flavour, fragrance, colour, size and shape all vary according to locality and condition; in this book each herb is carefully described and where practical, detailed illustrations are included to help overcome possible confusion. For ease of reading, each herb is written up in a similar format – a general description is given with mention of common varieties, habitat and cultivation techniques detailed, and finally kitchen uses listed. This latter section is generously treated with hints for use in soup, salad, meat, vegetables, cheese and drinks. For a beginner, this information is invaluable.

Although fond of herbs I have never really known which part of a plant to use for which purpose. Do I use the leaves or the roots, and what about the flowers? Well, I found this book a useful, supportive guide in the kitchen – its suggestions and culinary explanations would give confidence to the most inexperienced cooks.

A Pattern of Herbs was first published in 1973 in hardback. It is now available in paperback which will appeal to the budget conscious. Written and illustrated by an author who has grown and used herbs extensively, it is an excellent introductory book for those wishing to integrate herbs and good health into their life.

LEATHERWORK — Ian Hamilton-Head. RRP \$17.95. Hard cover, 134 pages, UK.

Leatherwork is a highly practical and informative reference book especially useful for the beginner to this fascinating craft. It is also a stimulating guide for those already working with leather.

The book is illustrated with 70 photographs of the author's own work and many diagrams which make each stage of leatherworking easy to follow. There are comprehensive patterns for various bags, belts, small things like watch bands, keyrings and hairslides in the project section. Easy-to-follow diagrams of different knots, plaits and stitching also illustrate the text. Some other decorative techniques demonstrated are carving, embossing, applique work, braiding, modelling and dyeing. Finishing processes, such as glueing and fitting catches, buckles and press-studs are also covered.

A comprehensive bibliography is included and will encourage the more advanced to seek out books that are both challenging and stimulating. Much thought has obviously gone into this fine selection. The suppliers section however is a slight disappointment. The publishers have aimed at maximum world-wide distribution and correspondingly have a suppliers list that covers Europe, America, Australia and New Zealand. The Australian section seems based on a hit or miss principle; it consists largely of state craft associations which act as local craft advisers and are definitely not wholesalers, together with several craft centres, one of which is a well known retailer of pottery and quality crafts. Inadequate research seems to have been the problem. New Zealand on the other hand seems more competently handled. This suppliers section is the only flaw in an otherwise excellently produced book.

Ian Hamilton-Head believes that it is your hands and ideas that are most important, and that you are enhancing the leather's natural beauty – not covering material and decorating it beyond recognition. Although an expensive book, the initial outlay should be returned many fold when you consider the hours of pleasure and fulfilment to be gained from becoming involved in leatherwork as well as the monetary savings from making your own gifts.

PART-TIME FARMING — Katie Thear. RRP \$19.95. Hard cover, 192 pages, UK.

The difference between *Part-Time Farming* and the average self-sufficiency book on the market lies in the emphasis on commercial production. This book is aimed at those with full or part-time jobs who wish to establish a viable income from some form of small scale farming in order to ease the transition towards self sufficiency or to provide a second source of income.

The initial chapter in the book deals with some of the basic

Book Reviews

considerations that need to be looked at before embarking on such an enterprise. The amount of land, time and energy you have available, finance, taxation, marketing, extra labour and machinery. The following chapters deal with specific projects: pasture crops, fruit and vegies, livestock and poultry production and their various by-products. Apart from general information on management, these chapters provide information and ideas on marketing your produce, possible sales outlets and sources of information.

This is a very practical and comprehensive book, but much of the information is specific to the UK, as are many of the sources of information referred to. There are lists at the back of the book on publications, suppliers and organisations together with a section for Australia and New Zealand which contains an interesting assortment of contacts.

There are many interesting ideas and much valuable information in *Part-Time Farming* but because it is so specific to the UK I feel it would be more sensible to borrow a copy from the library and check it out thoroughly before deciding it is the book for you.

THE HEALING FACTOR — Dr. H.G. Stanton. RRP \$5.95. Soft cover, 270 pages, Australian.

This book is an excellent guide for those seeking a more wholistic approach to health and wellbeing than that offered by orthodox medical practitioners. The main emphasis is on taking responsibility for your own body.

Chapters in the book cover such topics as preventative medicine through nutrition, exercise, correct breathing and positive thinking, and a section on healing systems. This covers homeopathy, Bach flower remedies, Schuessler's biochemic cell salts, acupressure, using a pendulum for diagnosis, and finally, choosing a suitable remedy or course of action. The history of each of the healing systems is briefly traced, a short explanation of the underlying philosophy given, and a description of the remedies themselves and how to use them.

There is also an excellent section on the power of the mind with suggestions for using it to relieve stress, control pain, control weight and combat fear, and more.

The final section in the book is a potpourri of ideas and theories ranging from ionisation of the air through to vitamin C therapy.

This is a book I would highly recommend to all interested in health and healing. The balanced, non-dogmatic approach makes it easy to read whilst the language can be easily understood by the lay person. *The Healing Factor* provides a comprehensive view of the alternatives available for those seeking to move away from conventional medicine or those already dedicated to natural health.

KEEPING RABBITS — Elizabeth Downing. RRP \$12.95. Hard cover, 144 pages, UK.

Rabbits have long held a fascination for children and over the years have maintained a small but constant role as a popular children's pet. With the present increase in living costs and growing work insecurity, the humble rabbit is probably going to discard its image of family pet and re-emerge as a backyard source of protein together with a handful of chooks and ducks.

Regardless of your reason for keeping rabbits, they are a gentle, tractable animal that can be kept with a minimum of fuss and expense. This little book will guide you through your initial teething problems — choosing and handling a rabbit, organising housing — this may involve building your own, feeding — there are several methods to choose from, breeding and rearing your own until finally you are faced with that decision — what do you do with all of them. The chapter on harvesting — a euphuistic word for killing and skinning is practical and down to earth and includes a range of recipes utilising rabbit. Instructions for tanning the skins are also given. As with all livestock rabbits are bound to have their off days and become ill. There is an excellent chapter on the characteristics of good health and descriptions of the diseases and disorders most commonly suffered by rabbits.

At \$12.95 this is an expensive book, however, if your children simply

cannot live without rabbits or you feel that they will provide an important but inexpensive source of protein for the family table, then this is a realistic outlay. The information is sound, practical and to the point and obviously the work of an author who has kept these animals for many years. One of the few books available on this subject and part of an English series that should be looked out for.

COMMON AUSTRALIAN FUNGI — Tony Young. RRP \$9.95. Hard cover, 156 pages, Australian.

This excellent little reference book will not only introduce you to the wider world of fungi but holds the key to identifying and thus understanding many of this fascinating group. Up until now there have been few Australian publications available to the public; those in bookshops of English or European origin are unsuitable for Australian conditions. Tony Young's book is an important step towards filling this gap.

There are fine sections in the book — an introduction to the world of fungi; the uses of fungi, including poisonous and edible fungi; the study of fungi, explaining how to collect specimens, which stains and dyes to use, and how to understand and use the identification key; the actual key itself; and finally a comprehensive species description which also includes line drawings and colour illustrations. There is a glossary and an extensive bibliography.

Fungi can be used in many ways — as food, in the production of soya sauce, cheese, bread, wine and beer, in the production of a wide range of antibiotics, and for natural dyeing of fibres, to name just a few. If you are interested in gaining more knowledge about identifying or understanding this little known species of flora, *Common Australian Fungi* will guide you through many hours of fascinating learning.

STRETCHING — Bob Anderson, illustrated by Jean Anderson. RRP \$7.95. Soft cover, 192 pages, USA.

Our ancestors were free of the problems we associate with a sedentary lifestyle because they had to work physically hard to survive. The machines that have made life easier for us have also created many serious problems. We drive rather than walk, use lifts instead of stairs, in short we have a labour saving device for nearly every situation requiring physical exertion. Thus we have become less active, and when people become less active they lose strength, they lose the natural outlets for release of built-up tensions, and they become more disease prone. However, during the 70s dissatisfaction with such an unhealthy lifestyle spread and the cult of physical fitness evolved. Jogging, ball games, swimming, aerobics, fitness centres and natural foods emerged and with them an awareness of the relationship between diet, exercise and good health. The role of stretching in all this? It is the link between the sedentary and the active life. It keeps muscles supple, prepares them for movement, and helps a person make the daily transition from inactivity to vigorous activity without undue strain. It is particularly important for those who engage in strenuous activities be they sporting or physical work (like building with mudbrick or stone). Stretching before and after this work will keep the body flexible and prevent muscle injuries from occurring. There are over 1000 drawings with clear, concise instructions in this book. Can you afford *not* to look at it?

* * *

To obtain books from Grass Roots:

1. Add up cover prices of books required
2. Add freight
3. Send total with name and address to Grass Roots, P.O. Box 900, Shepparton 3630.

FREIGHT: The following postage and packing rates are for up to three books:

New postage rates:

Vic./Tas.	N.S.W./S.A.	QLD./N.T./W.A.
\$2.90	\$3.90	\$4.90

All books without the publishers address are available from:
Grass Roots, P.O. Box 900, Shepparton 3630.

Feedback Link-Up Feedback

Dear Grass Roots,

I have had an Australian made spinning wheel for about eight years, obtained from Mr. K. Stephens of Kaylee Industries, 13 Lincoln Crescent, Pooraka 5095. It is made of aluminium alloy, is light, convenient, upright and wonderfully reliable. Any 'after-sales service' has been help fully given – even when the fault was mine! My wheel has done thousands of miles, and given not only good service, but much pleasure. I know Mr. Stephens will freight these wheels interstate, and although I do not know his current price, I do know the wheels are not expensive and are good value.

**Marina Kudinoff,
7 Doreen Street,
VALE PARK 5081.**

Dear Readers,

No dog should be allowed to become infected with hydatid tapeworms. Hydatids is a deadly disease which mostly affects children as they are the ones who most frequently handle dogs and who most frequently forget to wash their hands. The disease produces cysts which can grow over a period of years to enormous size anywhere in the body e.g. liver, lungs, brain. The hydatid tapeworm goes through a stage of development in the body of a sheep then a further stage in the body of a dog when the dog has eaten infected offal. Humans can pick up hydatid disease only from the dog, not from sheep. It is simple to prevent hydatid disease.

First: Never allow your dog to eat offal. If you kill your own meat either burn the offal or put it in a pit where it is inaccessible to your dogs.

Second: Make sure your dog does not have access to live sheep or carcasses in the paddocks. The hunter/killer instinct exists in even the most docile pet.

Third: Dose your dog every six weeks with Droncit, available from your produce store, pet shop and chemist. This will rid your dog of all varieties of tapeworm and is the *only* preparation that will destroy the hydatid tapeworm.

To Marigold Green: I can't imagine my sheep thriving or being happy on a diet of steak or your dog being happy with salad. He probably would not die but he may go and kill a chook or sheep to satisfy his need for meat. I have four dogs who thrive on dry dog food. They get a bit of meat occasionally and how their eyes light up when they see it coming. My dogs enjoy vegies, especially with cheese sauce and they love poached eggs, grilled cheese on toast and spinach pie. They normally get one meal a day but when it's really cold I give them porridge in the morning. Many a Scottish sheep dog has lived and worked all its life on a diet of oatmeal, but how boring!

**Barbara Mackenzie,
'Ross Farm',
via THARWA 2620.**

Dear GR Readers,

My wife, Jenny, and I (both 26) live on a property 50 km west of Dorrigo in northern NSW. The property comprises 590 ha of rainforest and wet sclerophyll forest with some small areas cleared by previous owners. There is a good rainfall and permanent creeks. The owner of the property has invited us to help develop a Christian community. The aim would be for a group of sincere Christian people to provide a stable community situation in which disadvantaged young people could be taught a range of new skills to help them cope with problems they may have. The type of person who we are able to help would depend largely on the talents of the community members and how we felt led to use our abilities, and so is open to suggestion at this stage.

The property lends itself most appropriately to small scale horticulture and agriculture of an 'alternative' nature, due to the land and environment. We hope to develop various craft activities as well and use all the activities on the property to teach skills to others. Jenny and I plan to build a mudbrick house next year, after most of the preliminary work has been completed. We are interested in hearing from any Christian people who feel that God is leading them into work as outlined. There is limited accommodation available and so visits can be arranged and

would be very welcome. It would also be great to hear from people who feel that they could contribute in a part-time capacity.

**Mark & Jenny Price,
Billys Creek.
via DORRIGO 2453.**

Dear Grass Roots People,

I'm in search of a place to rent in the mountains preferably the S-E region of NSW although anywhere in the mountains would be bliss. I love swimming in summer, log fires in winter and am into a health scene. I don't drink grog or smoke grass and I like peaceful, quiet people – they're my highs (and mountains). I've a stereo, so naturally electricity would be preferable but not necessary, and I'd prefer a solitary setting but close enough to a market or food outlet to be comfortable. I don't like fanatics of any kind and I like seeing the similarities all religions have with each other as they all come from the same source, they just use different techniques. Naturally I like broadminded compatibility.

If there is such a place you know of in Australia, write and let's hear from you. Tasmania is no problem and New Zealand, although expensive, would be given thought.

I'm a single male and 26.

**P.A.B.,
Box 1110,
GRIFFITH 2630.**

Dear Readers,

I am a 29 year old guy living on his land (135 acres) about 20 miles N-W of Grafton NSW. Slowly I'm becoming self-sufficient but have a long way to go. I've been here 3 years and enjoy it immensely although like everything, it has its hard times. I live basically and isolated through choice, finding that life here gives me all the pleasure I need except one—I miss good company. If there are any ladies who are interested in a gratifying, interesting, hard life, which requires self motivation, a strong mind and body, I would love to hear from you.

**Martin Lakin,
COPMANHURST 2460.**



Hi,

Does anybody out there have information on a Primal Community(ies) anywhere in Australia?

**Devi Caleron,
C/- Post Office,
NIMBIN 2484.**

Dear Grass Roots Readers,

Earlier this year I had the pleasure of holidaying around the north coast of NSW and the southern part of Queensland. I have decided to buy some property around Mullumbimby, Nimbin, Byron Bay or any country area that is close to the coast yet nestled in some bush rainforest with fresh water. I love these areas and can afford up to \$20,000. My aim is for love and peace and self-sufficiency. If anyone can help me either with shares or land I'd love to hear from you.

**Steve Findlay,
271 Curtin Avenue,
COTTESLOE 6011.**

Dear Folks,

I saw your name in a community referral service paper. I am very interested in moving to Victoria and living simply in the country. I would like to hear details of what we might expect if we did make it over to your area. Is there much contact with regional authorities, problems, etc? How are Americans thought of or treated after arriving to stay permanently? Thank you for any advice or helpful suggestions.

**Les Rathjen,
600 NW 9th St. Apt.6,
MANDAN N. Dak. 58554,
MANDAN USA.**

Feedback Link-Up Feedback

Dear Readers,

In reply to a letter from Mrs. L. Ratcliffe (GR 31) regarding cats, I wish to clarify one point in relation to the reduction of lyrebirds in Sherbrooke Forest Park. The lyrebird population in Sherbrooke Forest Park has remained stable over the past ten years at between one hundred and one hundred and twenty birds. To state that this population has been reduced by one third in one year either before or during this ten-year period is not correct. We rely a great deal for these figures on the Sherbrooke Lyrebird Survey Group who have been closely monitoring the lyrebird population for the past ten years. However I do agree with Mrs. Ratcliffe that cats in natural areas pose a significant threat to the fauna particularly when combined with foxes and dogs.

**John W. Lloyd,
Ranger, Sherbrooke Forest Park,
KALLISTA 3791.**

Dear Fellow Readers,

We'd like to use some of our wool to make a wool doona. Has anyone ever tried this and could they send us some suggestions on how to go about it? Does anyone know about making cheese using powdered milk? Could anyone advise how to grow herbs in the hot dry inland? Or better still how to turn cloudless blue skies into wet.

**W. & A. Allen,
'Lochable',
QUILPIE 4480.**

Dear People,

We are a Christian family with three grown independent children and Brendan (12) and Elizabeth (10). My husband is a handyman but because of disability from polio, we have not been able to own or work a farm. We are early retired (both 50). I enjoy doing craft work, growing vegetables, and tending small animals. When we were young we helped our parents on their farms, milking cows, growing potatoes and other vegetables for market, and helping with the sheep and cattle.

We wonder if there is a kindly farmer in the Brisbane, Gympie, Maryborough or Hervey Bay area of Queensland, who would allow us to caretake, lease or buy a few acres of land with or without a cottage. We would like to have a dog, pony, cow or two, fruit and vegetable garden and to be able to plant native trees and shrubs. We can afford \$15,000 for land or \$25,000 with cottage.

**Vanda & Bruce Lockhart,
25 Alice Street,
WEST ULVERSTONE 7315.**

Is Anybody Out There?

Wanted: Mate for 40 year old, female, gypsy delinquent! Tired of doing 'it' alone, have decided that bed socks - home-spun or not - are cold comfort on a frosty night. Is there a free thinking, good humoured male willing to share his time and aspirations (?) to either help search for the oh so, elusive Valhalla or share his already established fireside? I would dearly like to trade my worn out sneakers for an apron and/or gardening gloves and settle down and raise fat cats and cabbages! This is *not* an hysterical cry for help but rather a vital, freedom loving person's endeavour to find a compatible partner of like mind.

**Carole Nagel,
6/12 Kenilworth Ave.,
HERMIT PARK 4812.**

Dear GR People,

Having been married for 21 years and now divorced, I feel that this is my chance to practise GR philosophy. I breed Clydesdale horses, keep a cow and love animals. I am working towards buying some land within 50 miles of Brisbane and having done that I want to purchase a horse-drawn caravan and with two magnificent Clydesdale geldings, set off on a two year trip covering the whole of the long road between say Winton and Ballarat. This completed I want to return to my land and am determined to work towards almost complete self-sufficiency. I would like to open a heavy horse centre similar to the Courage Brewery set-up at Maidstone in Victoria, but that is, at present, only a dream. Is there a GR reader

preferably mid 30s and female, who likes country life, hard work, horses, and love in return for a bearded, balding, slightly eccentric social drinker, who likes jazz and old things but prefers non-smokers. Not a very good writer but would be pleased to hear from anyone who may be thinking 'That sounds great.'

**Bill Goddard,
5 Kilbowle Street,
THE GAP 4061.**

Hullo,

I'm a 23 year-old Arian lady who's looking for a fellow earthling (or whatever) to travel with. I have Europe, India, Thailand, Canada in mind but nothing is organised. I would like to get on a yacht somewhere along the line as I have some experience and love the life. I'm into sport, music, travel, good food and . . . having fun. Going my way?

**Kerryn Dodd,
Granite Springs,
NORTH DANDALUP 6207.**

Dear Grass Roots Readers,

I am very interested in growing lavender. Has anyone information on growing it and where can I obtain seeds? Also where can I buy soy bean seeds as I want to grow my own?

**M. Winsor,
Mt. Kilcoy Road,
KILCOY 4515.**

Dear Grass Roots Readers,

For many years my heart and soul has been on that self-sufficient farm - yet to be purchased. I've finally reached the time that I can now purchase 15-25 acres way out west. However, I have noticed that for about four to five times the money I have available, you are able to purchase up to ten times the acreage. So, if there are any other GR readers who are on the same 'wave-length' (whether purchasing now or intending to in the near future), why not combine, as many others have done) for that first *big* outlay - those acres. So let's get together and see what we can do.

**David Williams,
49 Bank Street,
MEADOWBANK 2114.**

Dear People,

To Allan Nixon of Loch Sport and any others interested in edible native plants, I can recommend the book *Wild Food in Australia* by A.B. & J.S. Cribble, published by Fountain books.

**L. Reid,
Antill Street,
BLAXLAND 2774.**

Dear Fellow Back to Grass Roots,

We have been avid and devoted readers of GR for nearly 3 years and have benefitted greatly. Though city dwellers, we find we live better and spend less, and scrounge more. We grow great vegies in containers on our roof.

We have 40 hilly tree and fern covered acres near Morrisett overlooking a picturesque valley about two hours north of Sydney. We are preparing to build in pise or adobe and round timber, council permitting. This consumes all our small savings and spare time but it is good to escape the ratrace. After reading Feedback, we know there are many like us and are keen to make contact with several Sydney GR people to share their knowledge and experiences. These people may like to spend some spare time at our farm. There are no facilities there - only a shed and 200 gallons of water, so it's back to nature. We are 46 and 35, with commonsense and reason and are *not* into religion, politics, drugs, excess alcohol or bad diet. We really admire those people striking out on a few acres as we know just how little we have achieved in two years. Good fortune to GR. Keep up the good work.

**John & Ronda,
59 Junior Street,
LEICHHARDT 2040.**

Feedback Link-Up Feedback

Dear Readers,

Could anyone tell me if there is anything that can be used on fence rails to deter or kill wood borers, but at the same time would be harmless to horses as they tend to enjoy a chew on the rails? Also I have a 1937 cookery book full of wonderful old recipes and remedies. One is for shaddock marmalade. Does anyone know what shaddock is? Some of these old recipes sound incredible. I haven't tried them as yet but feel free to write for any you may want to try e.g. chilli wine, rhubarb chutney, Worcestershire sauce, pickled pears, vegetable marrow jam, tomato and passionfruit jam, cough mixture, cheese paste, potted cream cheese. Remember these were made, for the main part, in large batches over the old wood burner. Maybe you would need to reduce the given amounts. In the meantime have a go at this one.

Vegetable Pudding

Cream ½ cup sugar and ¼ cup butter or suet, add ½ cup grated carrot, ½ cup raw grated potato, ½ cup breadcrumbs, 2 tsp mixed spice, pinch of salt, a few raisins or sultanas, ½ cup flour and 1 tsp bi-carbonate of soda. Steam 2½ hours and enjoy!

**Cheryl Field,
Lot 8 Mt. Mee Road,
Ocean View,
via DAYBORO 4521.**

Dear Reader Friends,

I have been through all my back issues trying to locate a recipe for a vegemite-type spread, but with no luck. I thought it was in a letter or just a small paragraph somewhere. Can someone please help?

**Judy Jones,
P.O. Box 76,
BEROWRA HEIGHTS 2082.**

Dear Readers,

None of our family has been able to indulge in a good wallow in the flu or a cold since we have adopted the yoga cleansing practice of neti. This practice involves washing the nasal passages with warm, salt water (cold water would cause intense pain). It removes obstructions from these passages and stimulates a fresh flow of blood in this area, helping to relieve headaches and nasal congestion. It removes any sinus condition and has eliminated asthma in our family also. A special vessel called a 'neti lota' is used, obtainable from yoga school and ashram. If one is not obtainable a small smooth-edged teapot can be used quite well. Fill the pot with about a pint of lukewarm water, about blood temperature. Add salt (1 tsp to 1 pt water) and a little honey can be added if the nose or throat are sore as it is soothing and healing. Insert the spout of the vessel gently into left nostril. Slowly tilt head to the right, while raising the pot in such a way that water runs into the left nostril. It should flow out through the right nostril. Ensure that the mouth is relaxed and wide open so that you breathe through the mouth, and don't swallow. This should happen automatically unless the nose is very blocked, providing angle of the head and pot are correct, and respiration is through the mouth. Allow the water to flow freely for about 20 seconds, remove vessel and blow the nose vigorously but not so hard as to cause injury. Repeat the same process in the other direction, putting the vessel to the right nostril and tilting the head to the left. Repeat again on both sides. Dry the nose completely in the following way: Clasp the hands behind the back and standing erect, bend forward from the waist until the head is upside down. Remain in this position for about 30 seconds, allowing all water to drain from the nose, blow vigorously through the nose about 5 times. Stand erect again. Close one nostril by pressing the side of nostril with one of your fingers, breathe in and out vigorously about 30 times in quick succession, repeat on the other side. This should completely dry the nose – if moisture remains repeat process till you feel comfortable. You may encounter difficulties the first few times you try this procedure, but don't give up, the benefits are well worth it. If difficulties continue, contact a good yoga teacher for advice. There may be a slight burning sensation as on first diving into the sea, but this will soon pass and not occur again

after the first couple of times. Persons who have had nasal surgery or suffering from chronic bleeding from the nose, should not do this practice without expert advice. This practice is also advantageous for those doing a lot of study as it brings fresh blood to the area, stimulating it. It can be indulged in at least once or twice a day at first (preferably in the mornings before breakfast), and then as often as one feels necessary, especially if it feels as though there is a cold or fog coming on.

Thank you to all the great and caring people who contribute to make *Grass Roots* the second bible for all those who are seeking to get a truly balanced way of life. There is so much evil in this materialistic society, but I honestly believe that if as many of us who are aware, do our best to create centres of light and love, wherever we may be destined to live, eventually the world will be a better place.

**Jacki Springett,
4 Walker Street,
NIGHTCLIFF 5792.**

Dear GR Readers,

I have a position available that would suit a grass roots couple or possibly an individual. I am finally ready to begin construction of my mudbrick home and still cannot get free of the city so I'm offering the position of builder/caretaker/whatever on my 40-acre property. It is located near Maleny Qld, in hilly country and has a large dam, creek at the bottom, watertank, orchard, garden (full of friendly weeds), greenhouse, irrigation, electricity, concrete slab and 35 ft x 25 ft shed. A sealed road and school bus go past the front gate.

The accommodation in the shed is a bit rugged with an old wood stove and fridge plus a bit of furniture. I'm hoping to get someone with handyman/carpentry skills and maybe mudbrick building experience (I have a Cinva ram). The house is architect designed, one level of post and beam design. There is some opportunity for small market gardening which may help finances in these troubled times and I should be able to pay a modest wage and supply an old Landrover ute. The place simply needs good old-fashioned hard work. I see the position as lasting at least a year. It would be hard at first and would probably suit someone physically rugged and resourceful. Please write giving some details.

**Charles Whipple,
37 Reinhold Cres.,
CHERMESIDE 4032.**

Dear Readers,

Here is a way to remove small scratches from polished wood surfaces. Rub over with the kernel of a walnut and the scratches will disappear.

**Judy Murtagh,
P.O. Box 408,
REDCLIFFS 3496.**

Dear Folks,

Can anyone tell me how to unshrink pure wool jumpers I've carelessly shrunk? I think many issues ago someone did say but I can't find it.

**Lou Burrows,
Post Office,
ROLLINGSTONE 4816.**

Hi Folks,

At present Evan and I are living on a friend's land. It's cosy just the two of us with the dogs, Budge the bird and 11 geese. We're living in a caravan on the edge of virgin bush. The dingos let out a howl now and again but I've finally got used to them.

To help Maria Basten and Rohan Airlidge (GR 33) with their problem with white ants. Take boiled linseed oil and stir in pulverised charcoal to the consistency of paint. Treat affected areas, or for best results, the whole walls on the outside. One coat is sufficient and there is not a man that will live to see it rotten.

**Evan Higgins & Jodi Gangell,
M/S 142,
YEPPON 4703.**

Feedback Link-Up Feedback

Dear Folk,

Can anyone help with an ant problem in our vegie garden? The little blighters eat the corn before we get a chance and they are prime suspects for other damage. Any help would be much appreciated.

A use for cigarette butts is to put 3 butts in a jam jar, soak in water until the water is the colour of black tea and add ½ cup of soapsuds. Shake well and use as a spray to banish aphids and other bugs. Not to be used on tomato plants. We recommend that you test on one plant before spraying the whole crop.

In a couple of years we hope to get on the road for education and experience before settling on some land somewhere, so if any readers are travelling through our area we would love to see them. We are 24, 21 and 2 plus due on Jan. 3rd.

**The Thomsons,
55 York Street,
BOULDER 6432.**

Dear Readers,

There have recently been many enquiries in the magazine regarding stove polish. Here are a few polishes, yet untried by us (our stove is still in storage awaiting the move out), from *The Aunt Daisy Cookbook with Household Hints*. I would be very interested in hearing of the results please.

1. Mix equal parts of boiled linseed oil, kerosene and vinegar. Apply to warm stove.
2. Four cakes blacklead, 3 tbsp of floorwax, 1 cup turpentine. Mix well together. Makes stove very black and shines like glass.
3. Four cakes blacklead, 2 cups mineral turpentine, 1 tbsp ammonia, 1 dsp crushed washing soda, 2 tbsp floor polish, 2 oz bluestone very finely powdered. Mix in tin and stir every time before using. Keep the lid on when not in use. When the stove is hot the copper in the bluestone causes the black to be baked on the metal, and so forms a permanent black finish.

Also, does anyone please know where you can get hard (e.g. cheddar) rennet-free cheese now that Associated Dairies in Dandenong have gone out of production – or perhaps a recipe for it? I would be most grateful for this information.

**Linda Drewitt,
'Lyncroft Cottage',
Tucks Road,
SHOREHAM 3916.**

Dear Folks,

We are buying some land near Woodburn (35 km south of Lismore NSW). We are all 'townies' and we are wondering if there are any families in our new location who have moved onto the land with a view to becoming self-sufficient.

**G.F. & D.M. Donahoo,
P.O. Box 656,
TWEED HEADS 2485.**

Dear Grass Roots,

I am very interested in making soap. I have searched for recipes but have been unable to find any. I thought perhaps your many readers may be able to assist me. Also any help with perfume recipes would be appreciated. I really love your sensible, no-nonsense magazine.

**Stef Rogerson,
C/- Palms C/Park,
TORQUAY 4657.**

Dear GR Connoisseurs,

I am sure that many GR readers enjoy a good Indian curry meal from time to time. Having had most satisfactory results from making my own curries I am now looking for recipes to make the pickles and chutneys either sweet, hot or savoury. One pickle, 'Brinjal Pickle in Oil' is of particular interest. I think the base ingredient is eggplant – if any reader has a recipe I would be most interested.

**S.R. Harris,
P.O. Box 808,
COOMA 2630.**

Dear GR Folk,

A group of people including myself banded together and bought a large parcel of land at an auction some three years ago now. We all have separate titles or joint titles as the case may be. The land is situated in a river valley below a mountain, inland from the N-W coast of Tasmania. Some families have moved in and are busy setting up with a small community now forming. From time to time other land in the valley comes onto the market. We would like to start a type of register of people who are interested in buying land with the intention of settling it. When and if land does come on the market we contact such people. The current price of land is in the vicinity of \$100 an acre and the blocks range from 100 to 200 acres. If anyone is interested they could write to me for information. Please state whether you would like sole ownership or if you would like to share. The land in general was previously cleared, some for farming, while the rest was logged. It now has about 30 years' regrowth and there are still some patches of rainforest. All have water either from the river or streams. We are under threat from a woodchipping company who is buying land if it is not sold after a short period so please, only enquiries from genuine people.



**Pat Doherty,
RSD 255,
LOONGANA 7315.**

Dear Grass Roots Battlers,

My wife and I have recently purchased 15 acres of what we are led to believe is prime black soil country. We approached the Department of Primary Industry and received the information requested. However, they suggested we needed a minimum of 50 acres to make it pay and 100 acres for a profitable market garden. We believe there are special methods peculiar to farming black soil successfully. Can anyone offer us practical advice on this matter?

We would like to hear from folk successfully living off a few acres and how they manage. We hope to grow small crops and a few fruit trees. Also if anyone is interested in 5-10 acres of this prime black soil at a very reasonable price, with power, dams and underground water, we may be able to help.

**T. Davis,
170 Mary Street,
MARYBOROUGH 4650.**

Dear Readers,

In GR 32 Wendy Allen speaks of feeding comfrey to her chooks. I know that the following info will be distressing to some and disbelieved by others. According to overseas and CSIRO research published 4 or 5 years ago, the ingestion (internal) of comfrey by all animals including pigs, chooks, cows and man over a long period of time leads to serious liver disease and cancer. I no longer have the literature to hand and so can't name the poison naturally occurring in comfrey but anyone seriously interested should be able to obtain the information from CSIRO (Division of Animal Research). The young leaves have the greatest concentration of poison. Apparently the species of comfrey grown in Australia is different to that grown in UK and this has led to some confusion as the UK variety grown in UK is safe.

There is no suggestion that the use externally as an ointment or poultice causes any harm, in fact there is no doubt of its beneficial qualities for healing cuts and tropical ulcers. However, I suggest anyone wishing to eat it or feed it to their animals read the 'other side of the story' from CSIRO.

The Alkaloids of Symphytum and uplandicum, Carcinogenic Activity of S. officinale (National Cancer Institute) and *Structure and toxicity of the Alkaloids of Russian Comfrey* — these are available from CSIRO, P.O. Private Bag, Parkville 3052.

**Dave Lambert,
P.O. Box 26,
NIMBIN 2480.**

Feedback Link-Up Feedback

Dear Folk,

In regard to the enquiry for stove black, I wonder if the following information from the *Rigby Country Book – House Crafts* might be of use and save a few cents.

Cast iron wood stoves and pot bellies can rust easily – apply blacklead regularly to keep out the moisture in the air. First clean grease or dirt away with turpentine, mix blacklead to a soft cream with water and paint on. Buff with a soft cloth.

Homemade Blacklead

450 g bitumen (from a service station, maybe)
280 ml linseed oil
140 ml oil of turps

Melt together in an old tin. While the stove is still hot, apply with a small brush which will reach into difficult corners. When dry it can be polished with:

570 ml benzine
30 g crushed resin
Finely ground blacklead

Dissolve resin in benzine, add blacklead. Paint on quickly, polish with soft brush.

Burn potato peelings and salt once a week in the grate to prevent chimneys clogging – a glaze forms on the inside of the chimney. Polish grates, fender and irons with a chamois . . .

This is an excellent series of informative and useful little books. I don't know if they are still in print – I picked mine up for the princely sum of 50¢ each in a newsagent's bargain box! Never, but never, pass by these 'throw-out' tables, to be found in bookstores, supermarkets, newsagents, etc. Many out-of-print, hard-backed treasures have come our way from these although I was once informed by a 'helpful' assistant in a large bookstore, that they only contained books pertaining to *way-out* styles, religions, recreational pastimes and food-fads. That particular cheapie-box yielded a number of Rodales – and I don't consider them, or us, 'way-out'!

**Brian and Margaret Holland,
P.O. Box 25,
KINGSTON 2604.**



Dear Folk,

Can anyone help with developing alternative political ideas? We need creative people who can write to us and exchange ideas about what kind of government would be good. We are into a system where men and women have an equal say.

**Joan Mackenzie & Philip McKeon,
17 Gordon Avenue,
TECOMA 3160.**

Dear G.R. Readers,

I have two problems that fellow folk may be able to help me with. The first is that mosquitoes seem to take a liking to me and when bitten I come up in lumps and itch for a while. This is a nuisance as I do love to get outside, particularly towards dusk when everything is so pleasant. I am taking Vitamin B tablets, do not have an immense amount of body odour (mentioned in previous GR), so I'm interested in any remedies that may help me.

My second problem is that I am shifting back to Melbourne through employment and would like to purchase a house around the Belgrave to Berwick area. Our preference is for a cottage type house (can be run-down as renovating is something I want to do) on 1-2 acres (just enough for vegies, a few trees and an animal or two). My finances are not in the millionaire class, but all replies would be appreciated.

**Graeme Barwise,
C/- 116 Brougham Street,
ELTHAM 3095.**

Dear Folk,

What a lovely world we had, it was in its beauty; plentiful bird and animal life, plus pure air and water – the nearest thing to paradise human kind could ever have, and I do not mean the really horrible tourist resorts' kind of 'paradise'. We are now working faster and faster to transform whatever remains of that paradise into a man-made hell. Few indeed are willing to admit that what above all is doing the irretrievable damage is the plague of humans caused by irresponsible breeding habits.

It has been estimated that one child of the Western hemisphere will have used the products of at least 2000 trees in a full lifetime, and needs about 2-3 hectares of land to produce the food, etc. it uses. As world population increases by millions every week, it is not hard to guess why the land and forests are devastated.

No-one seems to consider themselves a part of the whole, so you have couples who already have the advisable two children or less, light-heartedly going in for several more, then they say they can't stand the over-crowded cities and suburbs, and want to make for the bush. Obviously, with whole hordes thinking the same, what remains of the wilderness can hardly last long. Wherever civilised man in particular, goes, he has unfailingly destroyed the balance of nature. Wherever he goes to 'get away from it all', he takes 'it' with him because he/she are themselves the cause.

**Marion Fautleroy,
P.O. Box 243,
SARINA 4737.**

Dear Meg, David & Friends,

Well the latest GR has been perused a couple of times since it arrived last week and I have had my little say to the family – you know, 'Here's a nice block for sale. What about this one? And this is a smaller block but there's a house on it,' and so on. They now ignore me completely and let it all flow over their heads. I'm afraid they all enjoy their comforts too much to want to hack it in the country. I have a tiny holiday block at Loch Sport on the Lakes, where I would love to build a little house for the occasional escape from the ratrace. Could anyone down in that area give me a clue on how far I would have to go from Loch Sport to find the right type of soil/clay for mudbricks?

Is there any way of enticing teenagers (18 and 16) to enjoy the land, the hard work, the rewards and all that working the soil with one's own hands has to offer? I seem to feel at present that they would have to have been brought up working in that way instead of in a family that had to go out to work just so they could eat and be clothed. I wish GR had begun 20 years ago – we would have started on a different tack altogether.

Another small problem – what can I do to keep starlings from nesting under the verandah? They get in where the tiles and the beam under the eaves leaves a little gap, and nest on the lining. We tried jamming scrunched-up balls of chicken wire in the gaps, but they pick and pick and pick until they eventually work one piece out (that's all they need) and in they go. Usually this happens when there is no-one at home, so you don't realise they are there until they are well established again. They are such dirty birds – one year we had them in the ceiling over the bedroom and had the devil's own job to get to them, by which time we had a bedroom (and bed!) full of bird-lice. I itch just thinking about it. If anyone can help with any suggestions please let us know (don't say a cat – I have six but they are no help).

Thankyou GR friends, for keeping me sane, even if it is only bi-monthly, and be grateful all you lot who have already realised your dream. At heart, we are kindred spirits and I feel, reading GR as Joseph Sheckler from Bowen feels. His words, 'I like to think there are no strangers in my life, only friends I have not met.' If everyone used that sort of philosophy, we might be a more closely-knit world and definitely happier in heart and mind. All letters received on any subject, will be answered.

**Jenny Meighan,
99 Kinross Ave.,
EDITHVALE 3196.**

Feedback Link-Up Feedback

Dear Folk,

Along with Martin, I'd like to offer readers a service of information of anything you need to know pertaining to living or setting up alternative lifestyles. I am confident I can cover most topics and I'm asking a small fee of \$4.00 to cover costs and postage. If I can't supply the information required I'll refund the whole amount.

Hey, you Christian Grass Roots readers, would you write to me about the things you do. I have a lot of difficulty convincing my mainstream Christian brothers and sisters that it is all in line with Bible teachings, and I'd really love to have some feedback. I'd also love to hear from non-Christian readers who'd like to learn more about Christianity as it really is, not as it's been previously thought to be. Many good arguments there, but please write to me direct and don't bug David and Meg with your objections – it's a free world and isn't that our unification?

If anyone has a blackberry problem, use goats, but not milking ones because the bushes shred udders to bits. You cannot get toxic effects from goats eating blackberries, plus they cannot leach away in the soil can they? Stomp the green bushes down and let the goats eat only the leaves for diet. Once the bushes have died, it is simply a matter of first getting a whip cutter and using strong leather gloves moving the branches away for burning. Then dig out the roots and burn them. Make sure they burn all the way. Mind you, you can cultivate wild bushes into quite good and well producing fruit bushes, as long as the weed controllers of your local council approve.

**The Hindle Family,
C/- Post Office,
BURRAWANG 2577.
048-864-331.**

Dear Land Owners,

If you have any blackberries you have to realise there is no easy way to get rid of them. Spraying, which I am against, is easy but very expensive and not very effective in the long term.

First you have to get rid of the BB canes. Either tractor or hand slash them, or drive over them in your car to to squash them to the ground, and then burn them. If there are a lot of tussock grasses growing amongst them you can burn them at the best time of the year when the tussocks are dry. Having brought BB to ground level you can either get portable fences and stock with pigs, sheep, donkeys or goats. Pigs will dig up the roots. Sheep, donkeys and goats will eat the leaves thus starving the plant, but you have to keep doing this for at least three years. Goats need strong fences or should be tethered. One possibility is electric fences; then you have to build moveable houses and get water to them.

The other way is to disc up the area and then pick out the BB roots by hand or to dig roots out by hand (when BB are burnt, this is easier than when just slashed, also wet weather is best for digging roots out by hand). I have found a fire rake is useful for this job. When you do get rid of all your BB, don't think you've licked them – you haven't. There are a lot more growing in the state forests and government owned places, which the Lands Department doesn't seem to mind, but we, the private landowners are fined if we don't get rid of our BB.

**Ken Barr,
Buldah Valley,
C/- Post Office,
CANN RIVER 3889.**

Dear Grass Roots Readers and Young Ladies,

I'm a quiet bloke (180 cm), just 27 years young, about to return to the soil on a 20 acre bush block near Heathcote (100 km north of Melbourne). I get by on very little money by doing everything myself. I'll be building a stone house in the near future. Just one problem – I'm missing a companion and would love to share my idyllic basic lifestyle with a lady around 25-30. She must not smoke or drink – an earth garden type. Promise to answer all letters.

**Peter,
7 Mary Street,
BEAUMARIS 3193.**

Dear Readers,

My main interests are living off our land as well as breeding up a couple of draught horses. We have started on this project as the mare we have has only 3 months to go. Does any reader know of any books on making up carts and wagons as I have looked through a lot of bookshops and found nothing?

Just recently we built ourselves a small 4 sq log cabin out of ironbark and grey gum whole logs but we have come across one small problem – the logs are splitting. Is there any way of stopping this as we have plans to build a larger home in the future. We are a family of 5, two boys and one girl (6 yrs to 9 mths) and we would like to hear from other families with the same interests and lifestyle. All letters will be answered.

**Russell Jenkins,
Nowendoc Road,
MT. GEORGE 2430.**

Dear Grass Roots Readers,

Thought I'd just write and commend you on a marvellous magazine. Although I'm not a large scale farmer on 100 acres, I do delight in my little backyard with every spare inch of land under cultivation. So I really enjoy all the little helpful hints that come along through this magazine. In one issue someone was talking about preserving eggs for a long period, giving some very involved process. What my grandmothers used to do was have a jar of ordinary vaseline on hand, smear it well over the hands and gently cover the complete eggshell. The oil keeps out all the air and the eggs last for months this way. There is not an involved method of packing – they can all be packed together in a box if need be. It really works and is so simple.

The other thing was fleas in chookyards. Our town is very sandy and harbours fleas like nothing else, especially in kennels and chookyards. Once again, my grandmothers and many other farming people in our district had castor oil trees growing in the yard. They look very much like fig trees, but are poisonous to humans. You would need to be careful with the children but as little ones don't usually go into chookyards unattended and the bigger children can be warned, there is little danger. However, the trees do a very good job of keeping fleas and ticks away from the chooks, and the chooks instinctively don't go near the trees.

Can anyone tell me how to remove the olive oil from the top of the lemon juice (when preserving it) so that I can use the juice alone? How can I train new chooks to go into their laying box, even with an egg in the box? They lay everywhere in the yard but the laying box. Also, my husband is an upholsterer by trade if anyone needs help in that area.

**Jenny & David Florissou,
28 Nugent Street,
ESPERANCE WA 6450.**

Dear GR People,

We have returned to the land after an absence of seven years and are both working at the moment to pay off our 258 acres. Could anyone tell me where I can buy resin for soap. I have tried recipes without it but it is nothing like the lovely lathery soap made with resin.

Perhaps someone might be interested in the easy way I make my yoghurt. Bring 4 litres of milk to the boil and allow to cool to lukewarm. Mix one carton of commercial yoghurt with 2-3 tablespoons powdered milk and mix. Pour into icecream container or similar container and wrap in a newspaper and then in a blanket like a big parcel and leave overnight. In warmer weather just the blanket will do. Place in fridge for 12 hours or so before eating. Next time you make it use a cup of the previous yoghurt as a starter.

Also could someone tell me the latest theory on the internal use of comfrey? I made myself a delightful salad the other day with a bit of this and that out of the garden including comfrey. My sister said she had heard it was supposed to cause something but she couldn't remember what – it's certainly contrary to all herb books.

**Denise Lucas,
Verona,
via QUAAMA 2550.**

Feedback Link-Up Feedback

Dear GR Friends,

I am a 34 years old German woman wanting to immigrate to Australia. My professions are kindergarten teaching and social worker, but I would like to do also other jobs to get a visa. Who has experience with the problems of getting a visa and can show me a way out? How did other people manage to immigrate? If you can help me please write.

**Eva Voos,
Rubensstr 64,
1000 Berlin 41,
WEST GERMANY.**

Dear Grass Roots Readers,

I am asking help from people I know that may be able to point me in the right direction. Please I need people around me with strength. I have undergone six courses of chemotherapy being for Hodgkins disease. Through this I sought naturopathic help. In reading Dorothy Hall and Jethro Kloss I have developed some knowledge as to what kind of lifestyle I should have. At present I am living with my family who are devout drinkers and smokers and pillpopers. Financially I'm not too good. Total confusion has nearly set in, my strength and will power are depleting each day. Can someone advise me where I may find people like myself who maybe meet together or live together. I am not strong enough to live a healthy lifestyle on my own in my present environment.

**Diane Fay Baker,
17 Karog Street,
PELICAN FLAT 2281.**

Dear GR People,

Come late summer I will be embarking on the groundwork for a book about alternative lifestyles in Australia – it will be based in format on Robert Houriet's book *Getting Back Together*, only with a lot more photos. Help is needed, namely a list of contacts of communities, and groups of alternative people who I can stay with, live with, for short periods of around a fortnight. As the book is based on personal experience this contact is needed. If anyone is interested in becoming part of this venture by offering me a space in their lifestyle and their time to talk – could you please write to me. I am looking towards representing as large a cross section as possible. I will answer all letters so don't hesitate to write if you have any enquiries.

**Nello Christopher,
C/- 5 Bogalara Road.
OLD TOONGABBIE 2146.
Ph: 02-631-8979.**

Dear Folk,

We are a young couple with a baby on the way. We are very interested in contacting people or gathering any information on communes anywhere in Australia which still have available shares as we are interested in building our own home and setting up our own fruit and vegie gardens with a view to becoming self-sufficient. We remember reading about a commune in Buchan, Victoria, which still had shares for sale but have lost the address and would appreciate it if anyone could come up with it and any others they may know of.

**Trish & Rob van der Hoek,
C/- Post Office,
BROULEE 2537.**

Dear Friends,

We are a family of four living on 5½ acres north of Brisbane. We have done a lot in 5 years. We have built a house, we grow our own vegies, bake bread, milk the cow and have our chooks. We love it here and enjoy the lifestyle and clean air – an ideal way for our children to grow up. But that could all come to a stop! We are living in the Shire of Caboolture which is one of the proposed sites for a Uranium Enrichment Plant, a monster on our doorstep. Our local council is opposed to the idea but our State Government is of the opinion that the state needs it regardless of what the people or council want. We, the people, have no say at all so it seems.

I have written letters to all of them: the Council who said they were

against it but had not received many objections and the State Government has the final say anyway;

the premier whom I doubt even saw my letter;

the opposition leader, state members for this shire and adjoining shires.

Nobody seems too concerned. I'm beginning to wonder if anyone cares? Why aren't our locals writing objections to their councils and state MLA? What does one do now – give up?

**A. Robertson,
Maitland Road,
BURPENGARY 4505.**

Dear GR People,

I have just found your fabulous magazine and I am absolutely rapt in all the great letters. But most of all I loved the article on *Frypan Chooks* (GR No. 33). I live on the south coast and have 6 Black Orpingtons and one bantam and love them all. They are all very sophisticated chooks. Now I'm a grandmother too – two baby chicks hatched about 4 weeks ago. I had some fertile eggs given to me and my two young sons and myself witnessed for the first time a baby chick come out of an egg. We were absolutely fascinated, it was so beautiful. In a few years time we would love to go SS farming. I think I'm pretty resourceful but we don't have much idea on how to go about things. I love the thought of breeding cashmere goats. If anyone could give me information on how to start a SS farm, what sort of properties to look for and so on, I'm open to all ideas. Thanks Grass Roots for being the 'something missing' in our lives.

**Mrs. Ann Wilson,
32 Compton Street,
DAPTO 2530.**

Dear Grass Roots,

Re letter from Barbara Geitz about stick-fast fleas on poultry. We accidentally found a solution to this problem in our poultry when we put a lame weaner piglet, plus another for company, into our chook enclosure. It was fairly large and surrounded by high wire netting. Within two months there was no evidence of fleas, and after two years they still have not returned. The little pigs remained in the pen for 3 or 4 months until they were sold and none have been put in there since Barbara may live in town where this would not be a practical solution, but where space is available piglets are easy to obtain at markets or from a pig farmer. Our theory on the fleas' disappearance was that the pigs kept the dirt turned over and interfered with incubation and hatching of flea eggs, causing the flea population to eventually die out. We used no dips.

**Meg Edwards,
MS 282,
COOMINYA 4305.**



Dear Readers,

Readers may be interested in the case of my overweight problems. I am 40, 6 ft 6 in, a non-smoker, drinker, did plenty of exercise but was always overweight. My mother (out from England) is head of an organisation called 'Sanity' which researches the nutritional and biochemical food sensitivities of people. She advised me to totally give up sugar, milk, and Low-cal, and to use a food supplement called Spirulina (was found through analysis to be the richest source of protein yet discovered). For 2 weeks I lost 1 stone, next 2 weeks another stone, next 2 weeks another stone and am now 15-16 stone with no fat tum. I have also found that I am sensitive to dried fruits, tuna, salted peanuts, some brands of cheese and MSG. I also take a half teaspoon of ascorbic acid powder so no more illnesses. Food sensitivities are said to cause many of today's ills. Further info is available if you could send SAE and I will try to help.

**George Hall,
10 Queens Street,
AVENEL 3664.**

Feedback Link-Up Feedback

Dear GR and Folks,

Firstly, thank you for the wonderful service both you and your readers provide, it's wonderful to see so many unselfish people in this day of greed and of course, looking after the proverbial No. 1.

Anyway, to the point, with reference to Mr. Murray's problem (GR No. 34) and perhaps the problem of many other folk. I am an electrical contractor and feel reasonably qualified to offer help to those who wish to accept it. Also, as each year progresses trying to be more self-sufficient. Everything was fine with Mr. Murray's 5 KVA generator until he decided to connect his 14 gal HWS (actually, the size has nothing to do with it - 14-60 gal all have the same size element) to the generator. He may not have been aware of the simple calculations involved. His HWS draws 15 amps during operation (and with 9 people, operation time would be considerable) which in power consumption terms is 3,600 watts (75% of the available power), together with his freezer around 350 watts, 2 fridges about 300 watts each, washing machine 250-300 watts (and with 9 people again, there is no doubt that it is used every day). With all the other nick-nacks that consume power it leaves no doubt as to why the generator had decided to take an untimely holiday. Mr. Murray, at any one time, could probably be drawing as much as 4,800 watts which means that the generator is running at near capacity. Remember NSW last winter - inadequate generating power means blackouts. Stress factors and overloading are very serious considerations to bear in mind. A costly lesson learned by Mr. Murray and perhaps other folk as well, if careful planning, calculation and above all, regular maintenance are not considered. I could go on further but feel that I have taken up enough space.

**Ray Kovalik,
P.O. Box 866,
PORT MACQUARIE 2444.**

Dear Folks,

Barry Mannall (GR No. 34) was worried about ticks. My husband and I live in cane-farm country, east of Nambour where ticks, among other things, abound. As Mark reacts severely to tick bites, a friend of ours suggested the following remedy which has proved most effective:

Grate a raw potato and wrap the gratings in some porous material such as muslin to form a poultice. As the juice of the potato contains the active ingredients, squeeze it through the material and place poultice over the affected area. Secure and keep in place for approx 24 hours. Repeat the process if necessary and throw the antibiotics away!

**Beau & Mark,
Little Lakes Farm,
Paynters Creek Road,
NAMBOUR 4560.**

Dear Grass Roots Readers,

I read with interest Steven Guth's article on Pendulum Power (GR No. 34), and feel it is worth elaborating a few points here. I have been using a pendulum off and on for some time and have found it to be most satisfying and reliable. Contrary to what Steven says, I find a metal (gold) ring to be a very good pendulum. I use this with a string draped over my right (writing) hand with my elbow on a table and the forearm at an angle to allow the pendulum to swing freely. The pendulum swings over a sheet of paper with a cross marked on it, with 'Yes' written along one axis and 'No' along the other. I have also used the clockwise versus anti-clockwise circular movement which Steve mentions, but find the cross more to my liking.

Steve stated early in the article that one should face between north and east when using the pendulum but later stated that he got the best results while facing west? I have found that west, in fact, gives me the best results but perhaps the direction depends on the individual or the location. If in doubt, why not simply ask the pendulum which direction is best. Another very important factor to be remembered whilst using the pendulum is not to allow the conscious mind to affect the outcome, which sometimes is easier said than done and requires some practice, particularly if the question being asked has an expected or strongly

desired answer. One must keep the mind fixed only on the question with no conscious thought of which way the pendulum is desired to swing. Through both asking the pendulum itself and through meditation I would offer the following possible explanation for pendulum power.

As Steve suggests, the pendulum works through obtaining access to the vast stores of memory and knowledge in the unconscious mind. But where the information being sought is not contained within the person's own unconscious, then help is sought from one's spirit guide or other disincarnate entities. As each individual takes a little time to become accustomed to the efficient use of the pendulum, so it takes some time for one's spirit guides to learn how to influence the pendulum answer for those questions which cannot be answered by the individual's unconscious. A little practice and patience is therefore required before proficient use can be made of the pendulum.

If anyone is interested in using this excellent method of obtaining information not normally available to the conscious mind, then using the methods outlined in Steven's article to get started would be a good idea. It should be remembered however, that this is not the only method, and because every individual is different, no hard and fast rules for the use of the pendulum really apply. Once a reasonable proficiency has been reached, questions as to which of a number of alternative procedures that are best for that individual can be asked of the pendulum. The pendulum is a very good method of obtaining access to the normally hidden portions of the mind when used properly and with unselfish motives. It is not however the only method as there are many tools which can do an equal if not better job of this when fully developed. Certain forms of meditation will give equally, if not more satisfying results, particularly when the answers to complex questions are not easily broken down into yes/no outcomes.

**John Lambert,
3 Stralia Place,
MELBA 2615.**

Dear Readers,

We intend starting our round-the-world journey early in 1984 and would truly appreciate some information from the seasoned travellers out there. Has anyone travelled on the Trans-Siberian railway? Worked in Japan or Northern Africa? Travelled through Sri Lanka? We would love to hear from you. We are considering all countries as areas for travel, so any information on them will be eagerly devoured. Help a couple of Australians discover the world!

**Robyn McDougall,
149 Flinders Street East,
TOWNSVILLE 4810.**

Dear GR Farm Folk,

We have arrived in Australia from New Zealand and are travelling through Queensland in a VW Kombi. We find we are giving all our hard-earned money to owners of caravan parks as there are 'No Camping' signs in all the best possies. How do other travellers get on? If anybody would like a hand on their holdings in exchange for a bit of produce, company and knowledge (we hope to acquire some land after our travels and live an alternative lifestyle), we'd be glad to help out. Pete and Trev are NZ electrical fitters and are awaiting QUEB tickets - they are willing to do trade or labouring work. We are all really willing and wanting to learn handcrafts and other alternative living knowledge. We are all in our early 20s just looking for a peaceful, healthy existence. So please anyone, feel free to write to us from all the nice places in Aussie, or keep your eyes open for a red kombi looking lost! Also does anyone know of any alternative festivals in Australia? We attended the Nambassa festival in NZ and really enjoyed it. We will try to reply to everyone who writes to us.

**Pete, Trudi & Trevor,
C/- C. Hill,
6 Guys Hill Road,
NAPIER NZ.**

Feedback Link-Up Feedback

Dear Grass Roots Readers,

All these years I thought I was a voice crying in the wilderness for controlled burning of the bush and lo, I have a mate in David Kirkpatrick of Bullen (GR No. 34). I am a foundation member of the oldest organised Bush Fire Brigade in Victoria still in existence namely the Beaconsfield Upper Brigade. In the first twelve years during which time I was associated with it we lost no building by bushfire despite thanks to some local firebugs, we had a major fire season every four years.

Despite the persistent burning including much pre-season burning off the flora and fauna did not suffer. However there has been no major fire here for over 30 years and many new houses have been built in the area, with the bush almost up to the buildings in many cases. Any suggestion that some clearing or burning off should be done is strongly resisted by the amateur conservationists who have never seen a fire with a hot north wind behind it. Should such a fire occur I feel that at least 50% of the houses up here would burn with possible loss of life as the panic-stricken residents jammed the roads in their efforts to escape, in all probability preventing the CFA units getting in.

Incidentally the Beaconsfield Upper Brigade will celebrate its Diamond Jubilee in 1985 so as a foundation member I am no chicken but the lessons of my youth are still fresh in my mind and I have taken such precautions as I feel are necessary to protect my own property but I fear greatly for some of my neighbours.

**Kenneth Hudson,
Reed Avenue,
BEACONSFIELD UPPER 3808.**

Dear Grass Roots,

We are a very enthusiastic married couple, mid-twenties who have a deep love for nature and a strong desire to move to the land after spending all our lives in the city. We have been planning and saving for a few years now and feel that we are sufficiently prepared to make the break without making too many mistakes. We would like to meet a couple, similar age, who are into healthy living and alternative lifestyles who would like to share the adventure of starting a new life on the land. We are looking for 25 acres or more in the Kemsey area and can afford \$20,000. We would like to buy the land jointly with another couple and divide it according to the amounts put in and assist each other as much as possible with settling, building, farming, etc., but otherwise living independently. We are quite flexible with our ideas and are open to any suggestions.

**Mark & Jenny Cornell,
2 Pindari Place,
ARNCLIFFE 2205.**

Dear Grass Roots Readers,

First of all we'd like to thank Sandra Dibbs & Sunrise Realty of Nambour for their help in finding our new block of land. We would like to contact anyone in the area who is building, or had built, in mudbrick under category 3 cyclone specifications as building regulations differ from here. Mainly load bearing and earth floors. We'll be moving up at the end of February all going well.

**Lee and Jon Carpenter,
McCabes Road,
POMONA 4568.**

Dear GR Ladies,

To any unattached and free GR ladies - I have an ideal large block of bushland right on the top of the Blue Mountains. I am a quiet, friendly, caring and sharing type single male who is fond of the simple life and I am seeking two or more similarly minded, practical down-to-earth country-typeladies to help me develop and share this land to our mutual advantage. Some craft skills or any other specialised skills will be most advantageous. Age or nationality are immaterial. Ideals, sound character, integrity and a 'stay with it' attitude are more important.

**John Danzie,
'Lenore',
Cnr Mamre & Erskine Park Rds.,
ST MARYS 2760.**

Dear Folk,

If there is anyone in the Watagan/Wollombi area interested in either writing (from anywhere) or getting together for head trips I would be very happy to hear from them. I'm into everything that keeps all life on mother earth free and individual.

**Diane Bull,
'Eureka Sanctuary',
Watagan Road,
WATAGAN 2325.**

Dear People,

I came in contact with your magazine this week and something which disturbs me is the fact that many of the letter writers seem to be oblivious of animal rights. In my awareness of the One Source of all Life, animals are our 'young' relatives, to be treated with respect and not to be fattened, killed and eaten at times convenient to our appetites! Christ taught this, too.

I recently bought a bare half acre with a little house at Birdwood in the Adelaide Hills and have been very busy planting over 300 trees, shrubs and small bushes and flowers. The block will be a small paradise in a few year's time. The locals say that the well should never dry, even in our long summer drouthy and there is a large water tank and mains water as well. The house has 2 B/R. I'm hoping to find someone, a vegetarian, who would like to live in and help develop and use the land. There is plenty of scope for flowers, vegies, and herbs, plus 2 sheds suitable for crafts or hydroponics. Anyone interested please write.

**Marilyn Grigg,
21 Barrelder Road,
TORRENS PARK 5062.**

Dear Grass Roots Readers,

At 41 years of age I have finally made the break and now own five acres of land 2 km from Kilkivan which is 50 km N-W of Gympie and 200 km north of Brisbane. Accommodation consists of a 10-ft bondwood caravan with a large annexe. My aims are to build my own house and attempt self-sufficiency using the principles of permaculture. I am not a vegetarian but I am concerned with a sensible diet. If there is another woman out there who is in my age bracket or older who is interested in participating in this venture, I can supply more details of my plans.

**Lyn Browne,
C/- Post Office,
KILKIVAN 4600.**



Dear GR,

In your *Bumper Book* there was a recipe for ginger beer that we've been using. It makes a delicious drink BUT . . . we found that after only a week in the bottles the beer was so fizzy that upon opening one we would be showered with a high-pressure ginger-beer fountain, and only an inch of the precious liquid would be left in the bottle. After two weeks, bottles began to shatter. We decided to experiment with different amounts and types of sugar; like the author, we found brown sugar unsatisfactory - lots of fizz that didn't last. We are still experimenting, but seem to have achieved a satisfactory method by following the directions for making the plant given in the *Bumper Book* recipe, and using, not 1 1/2 lb of white sugar, but a 500-g jar of honey (about 1 lb 2 oz) to a two-gallon bucket of water. This fills about a dozen 750-ml beer bottles. This recipe needs the full three weeks to mature, and it is on the dry side, but this suits our taste better than a sugary brew. Best of all, you can open a bottle with confidence!

**Stefano Spinaci,
P.O. Box 84,
NAGAMBIE 3608.**

Feedback Link-Up Feedback

Dear Folks,

Please, can anyone help with information on home use of wind-powered generators. I'd like to hear from anyone who has practical experience in this field. My husband would like to build one.

**Fay Stevens
PO Box 57**

LAKE WYANGAN 2680.

Dear Readers,

In reply to Rosemary Box, re chilblains, GR 34, p. 6, my father suffered with frost bitten toes in France during World War I which resulted in bad chilblains every winter while hand-milking the cows on the farm. He obtained much relief by soaking his feet in a basin of hot water and adding more hot water to reduce the inflammation. He then rubbed his dried feet with methylated spirits.

**Nancy Brooks
3 Nobel Street
WARRAGUL 3820.**

Dear Readers,

I am interested in carnivorous plants and I am having difficulty finding information about how to propagate and maintain healthy plants. If there is anyone who can give me any information on them please write to me.

**Kathy Hulme
PO Box 161
WAUCHOPE 2446.**

Dear GR,

I am looking for a female business partner. I have 40 acres with a mudbrick house (needs a little work on it). I hope to turn it into a nursery and craft establishment, using part of the house for sales and the rest for living quarters (it is a big house). There would be no outlay of monies at all for the partner and it would be rent free. All that's required is someone who will get in and work with me. Must have loads of enthusiasm and a sense of humour. Children welcome and animals (cats with bell only). I don't expect a lot of profit for the first few months but this country has great potential, high rainfall, cold winters, but is really quiet and beautiful. I would not be living in the house so there would be complete freedom there.

**D. Ansel
C/- Post Office
ADELONG 2729.**

Dear Readers,

I have what I consider a worthwhile project where several persons – perhaps a co-op or unemployed persons would benefit. Capital will be necessary to get it started. I am hopeful of obtaining enough cheap land in the Cairns/Cooktown area or if anyone knows of some fairly large acreages please write to me if interested. Anyone wanting information about this project please write to me. I am a sole parent with two children so can't do the constructing side of the business alone and unaided.

**Jennifer
Box 153
YEPPON 4703.**

Dear People,

We are a family of 3 at the moment and are living in the N-W of WA. We have been here for 2 years saving for land of our own. We have decided to leave around the end of June to go over to NSW. We are asking if there is anyone who would be interested in renting their farm to us around that time as we would like to mellow out for a while after such a barren land we have been living in. We would like a house in which we could live and work from until we find our own dream land. If anyone is interested in this proposition we would also be able to mind whatever animals are around and we would fix anything that needed repairing.

**Tracy Turner
17 Wurangura Street
NEWMAN 6753.
Ph: 091-752-083.**

Dear Readers,

I have had great success cooking bread in our fuel stove (annexed to our BBQ) after quite a number of failures to start with. I would like some hints if possible on cake cooking times, also some idea on how to go about cooking a baked dinner in same.

**Carolyn Davis
297 Woronora Road,
ENGADINE 2233.**

Dear Friends,

We are a West German family hoping to emigrate. We visited Australia for 3 months in 1978, but our application to migrate has been refused. Before reapplying, I would like to find a job. I (Olaf) am 30 and a qualified male nurse. Can anyone help me find a hospital post in the care and rehabilitation of tetra- and paraplegics? I intend to visit Australia in May 1983 so that I can introduce myself with references and qualifications. We would be grateful for any help or advice.

**Brigitte, Olaf & Lee-David Klein
Bahnhofstr. 24
5411 HILLSCHIED
WEST GERMANY.**

Dear Grass Roots Friends,

The article about building a tank was most timely for me as this is my project for this year. I was going to use rock but have decided that for speed I will make a concrete form first and cover it later with rocks at my leisure. There seems to be some reason why water tanks are not square. Can anyone explain this? My tank could be about 3 metres square: should I round the corners? Do I need to make baffle walls? If so, how many for that size? Do hope someone can help here – I won't start things going too soon. Just getting rocks is a pest. They are in great abundance in the creek 200 metres away but getting at them in quantity is impossible. I may have to rig up a flying fox or similar pulley system somehow.

Brian Sweaney on Wedge Island has a few problems I have encountered. Some insects seem to eat my vegie seeds too – sometimes it's ants, or slaters, or little fly things. I have tried putting pepper (black or white) with the seeds and this seemed to work. I thought I'd see if some old paprika would do the trick but alas, I think they relished the stuff and the seeds were just a bonus! Anyway my small attempts continue and we have finished the carrots and spinach and now peas and beans are on the way. I bucket all the bath water out and I believe the plants feel they must make an extra effort to reward my diligence. Oh yes, another answer for Brian. I think the oven rust will burn off when the stove is hot – I love the wood stove for its self-cleaning oven. I don't think salt water would be too good for any garden but on the same track I have noticed many people doing complicated things to seaweed before putting it on their dirt. We here on King Island usually just put it straight on and let the weather wash and rot it. Of course, if it can be left another season or composted it is even better. It is one of our great natural abundances here and we collect it in 'super' bags – a fitting 'thumbs-up' to the chemical companies I think.

Another query – has anyone used Scarlet Runner beans when they dry? Would they work in soups, etc. and sprout too? Are they a good protein source? They grow so well but need to be eaten very young as greens. I intend to experiment anyway so perhaps I may be able to write with some answers myself later.

Perhaps Cecily Ord may think of using rocks to make her fibro shack more presentable. A friend here has just done an inside wall in his home and the result is beautiful – even if it was a messy and frustrating job. Doing it from the outside should be easy. Nails and wire attached to the timbers should hold it all together.

**Robyn Eades,
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gumnut gossip

Meg Miller

The long-awaited Christmas break sped by so fast I wondered if some system was afoot whereby there were shorter days for holidays and longer ones for workdays. But then we all know that if you are busy, no matter what you are doing, the hours seem to fly. All of the GR staff enjoyed the break and have come back to work full of wild tales with which to regale each other during the quieter times(?) over the next few weeks.

The dust is still rolling by, and the equipment coughing and spluttering. The nearby paddocks have had such a blowing around these last couple of weeks that surely there cannot be much topsoil left. No doubt our dust problem will be solved only when the paddocks are blown completely bare, a rather horrifying thought. From readers' letters it would seem that large areas of Australia are faced with the same problem; there is some consolation in knowing you are not alone in seeing a garden shrivel up and die, in learning how to 'make do' with a dribble of bathwater and in finding yourself constantly paying out for precious stockfeed. Perhaps out of it all will come a greater awareness and respect for the gifts of nature. During the good years we take it all so much for granted – now is the time for rethinking our ideas and policies on conservation, not only of the environment but also of water, energy, and even more simple things like packaging, recycling and responsible consuming.

This issue we have two exciting news items to share. Firstly we would like to introduce to you all our New Zealand co-ordinator, Jackie Pope. Jackie lives in Ponsonby, an inner-city suburb of Auckland, and has been an avid reader and correspondent for many years. She also contributed to our special *Family Book* last year. Jackie has a supply of back copies and other GR publications, so readers in New Zealand will enjoy a faster service if they order these directly from her. She will also be a focal point for articles, feedback and any information required by readers in or visiting the country. During our office Christmas party (no turkeys invited, not even cooked ones) we rang up Jackie and sang our greetings across the miles; it was fun for us but rather overwhelming for her! However it was a reminder that despite being separated by distance she is still part of the team that works together to give so many peoples' ideas and experiences visual expression. Welcome Jackie, from all of us

over here. (Jackie can be contacted by writing to PO Box 3767, Auckland I, NZ.)

Our second news snippet is the announcement of another GR marriage! (Romantic can turn to the 'Amorous Adventures of Margaret and Michael' in the *Family Book* for an in-depth coverage of our first GR wedding.) In late 1981 we personally answered a *Land Link* letter; Chris was interested in learning about self-sufficiency and caring for animals and came to live and work with us. During the year she wrote out a 'soul mates' note for publication, and as a result has met Mr. Right. She is now exchanging poultry and goatkeeping for dairy farming, and is eternally grateful for the opportunity Feedback provided for meeting another likeminded person. We miss her visits in and out of the office with the latest chook or turkey drama, but feel quite proud to know that Cupid has struck again.

After many months of silence we can say, quite categorically, that our books *Australian Goat Husbandry* by Pat Coleby and *How to Start a Nursery or Herb Farm* by John Mason, whose imminent publication was announced so long ago, are at last about to be printed. Before going into lengthy explanations, may we humbly apologise for the inordinate delay and the inconvenience it has caused so many people. What in fact happened is that we started book publishing with two very demanding manuscripts and found ourselves in all sorts of trouble. The city-based editors we turned to were not the right people for the job, and our inhouse attempts at editing further confused matters. Now, however, three discarded paste-ups later, we have thoroughly revised and updated versions booked in to be printed in the first quarter of the year. Phew! There will be more news of these in the next issue.

Finally, for those who have written to me in the last couple of months and not received a reply, hang in there, I am slowly working through the piles on my desk. My workload in late 82 was such that I didn't have time to scratch my nose but this year, with a little more help, and a little more delegating, with no special publications like the *Family Book* to distract or destroy me (plus that extra hour in the day), I am going to *catch up and keep up to date with my mail*. Yes, my New Year Resolution for 83!



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